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PENNSYLVANIA VEGETABLE GROWERS' NEWS

Publication of the Pennsylvania Vegetable Growers' Association
March, May, July and December

Vol. XIII State College, Pa., March, 1943 No. 1

President Ray W. Wenker, Bustleton
Vice-President Louis Orient, Bridgeville
Sec'y-Treas. Jesse M. Huffington, 625 Holmes St., State College

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Ask your Neighbor to join your Association or to subscribe to the only publication in Pennsylvania devoted entirely to the production and marketing of vegetables. The dues are only one dollar a year, payable to The Pennsylvania Vegetable Growers' Association, State College, Pa.

The Annual Meeting
Y. W. C. A. Auditorium, Harrisburg, Pa.
JANUARY 13, 1943

The program, as published in volume XII, No. 4 of the News, was carried out with the exception of labor discussions by John M. Willson, Stanley Q. Becker and Emerson Kane, who were unable to attend. Mr. Fred Allen showed movies of labor saving devices in the place of Mr. Becker's talk.

Approximately 125 persons were present in the morning and 140 in the afternoon.

The following committees were appointed by the President:

AUDITING: R. R. Comly, Bustleton
R. B. Donaldson, State College
NOMINATING: C. K. Hallowell, Bethayres
Edward Fleming, Andelusia
Mark Ladd, Waverly
RESOLUTIONS: Gilbert Watts, *Chairman*, Bellwood
A. C. Thompson, Morrisville
K. S. Philp, Ridgefield Ave., Pittsburgh

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MEMBERSHIP: A. C. Thompson, *Chairman*

C. K. Hallowell
Louis Orient, Bridgeville
Jesse M. Huffington, State College

Minutes of the previous meeting were read and approved.

The following financial statement was audited and approved:

ANNUAL FINANCIAL STATEMENT FOR 1942
January 11, 1943

RECEIPTS

Advertisements	\$249.50
Memberships	419.00
Total	\$668.50

EXPENDITURES

Annual Meeting	\$101.20
"News" (3 issues)	156.75
Stenographic Assistance	39.50
Postage	190.51
Bank Charge	2.00
Stationery	101.47
Miscellaneous	10.10
Total	\$601.02

Bank Balance January 20, 1942	\$ 80.17
Total Receipts	668.50
Total Expenditures	\$748.67

Balance on hand	\$147.65
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JESSE M. HUFFINGTON
Secretary-Treasurer

The nominations committee presented the following candidates:

President—Ray W. Wenker, Bustleton.
Vice-President—Louis Orient, Bridgeville.
Secretary-Treasurer—Jesse M. Huffington, State College.
Directors—R. R. Comly, Bustleton.

Harry Hopkins, Clark's Summit
K. S. Philp, Pittsburgh (16), Ridgefield Ave.
R. B. Stutzman, Cramer
A. C. Thompson, Morrisville

These officers and directors were unanimously elected.

The resolutions committee expressed sorrow for the loss of former President, R. R. Brader, by presenting a resolution incorporating the obituary as published in Vol. XII, No. 2 of the News (March, 1942), which was passed, unanimously.

Other resolutions passed at the annual meeting in Harrisburg, Pa., January 13, 1943, and sent to the authorities as indicated below, show that growers are concerned about the availability of labor, the avoidance of governmental "red tape" in releasing school children, and the freedom from subsidized production and unpredictable price ceilings that make it difficult for growers to plan an "all out" production program.

January 13, 1943

TO—Dr. Francis B. Haas, Pennsylvania State Superintendent of Public Instruction

SUBJECT—SCHOOL LABOR

WHEREAS; a serious labor shortage jeopardizes good production, and vegetable growers must not expend scarce seeds and fertilizer in the production of crops for which harvest labor may not be available, therefore, be it

RESOLVED; that the State Department of Education be requested to establish provisions under which half-day sessions, or, other appropriate adjustment of school schedules can be made, in order to assume a daily supply of help during critical harvesting periods.

January 13, 1943

TO—The Hon. James F. Byrnes, Director of Economic Stabilization, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—MIGRATORY FARM LABOR.

WHEREAS; (1) farmers in the past year have lost about a million and a half workers from the farm; (2) our Government has set as our food production goal in 1943 a volume at least equal to our record production in 1942; (3) migratory farm labor from the South has been deprived of its means of transportation by recent restrictions on gasoline and tires; and (4) food production will be seriously curtailed unless action is taken to relieve the farm labor shortage, therefore, be it

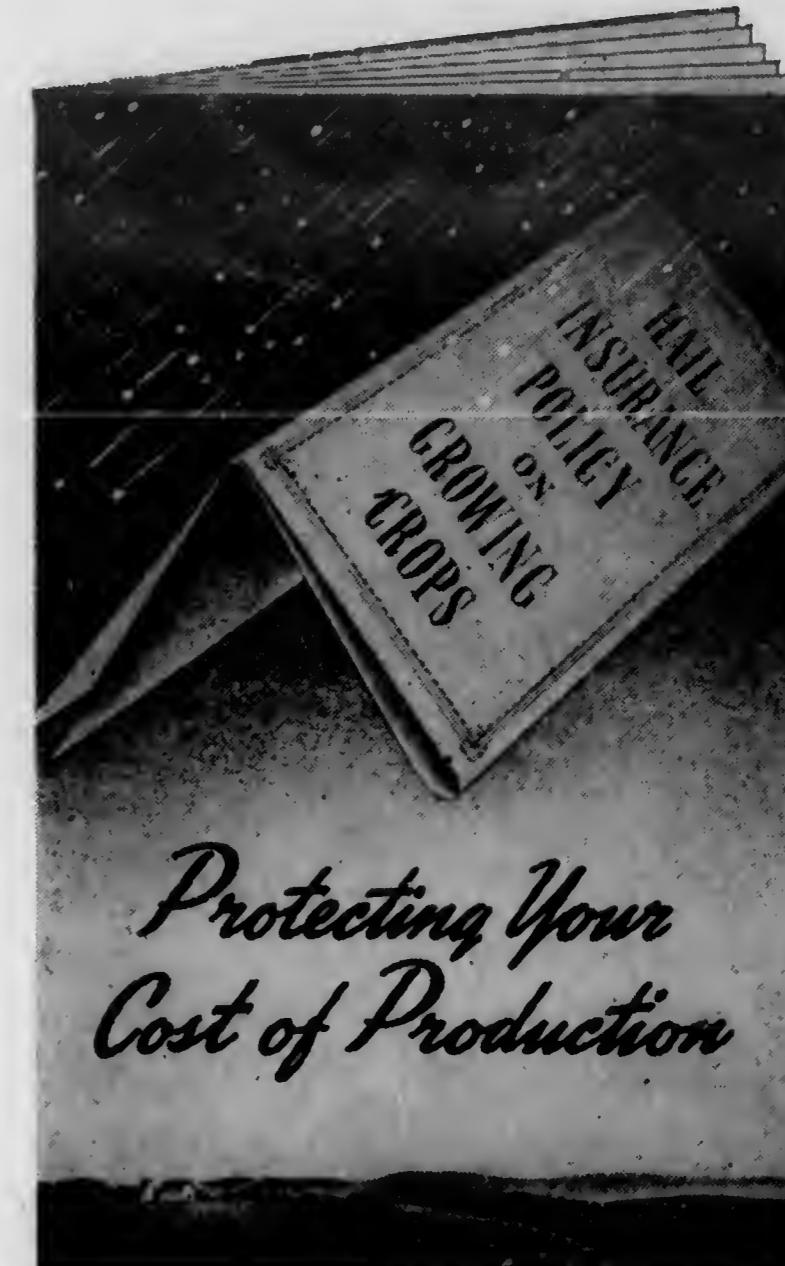
RESOLVED; that The Pennsylvania Vegetable Growers' Association urgently requests that our Government take immediate action to allot funds and to provide for suitable transportation next Spring to heavy food producing areas in the North and to assure farmers now that something will be done to relieve the critical shortage of labor in the active growing season in order that farmers will be encouraged to plan full production for the coming season.

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THIS FREE BOOKLET tells you how to protect your income against loss from hail damage to crops. You owe it to yourself to get the facts. Hail is three times more hazardous than fire, average U. S. figures show. And, no section of the country is immune.

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- Constitution Department of Springfield
- Sentinel Fire Insurance Company
- Michigan Fire & Marine Insurance Co.
- New England Fire Insurance Company

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HAIL DEPARTMENT
90 John Street, New York, N. Y.**

January 13, 1943

TO—The Hon. Prentiss Brown, Director, Office of Price Administration, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—PRICE CEILINGS AND PRODUCTION RESTRICTIONS FOR NON-ESSENTIAL VEGETABLE CROPS.

WHEREAS; (1) vegetable production is a highly speculative business subject to unpredictable losses such as crop failure and low yields; (2) the average vegetable grower needs the occasional abnormaly high price which he can get because of scarcity, to offset partial or complete losses at other times or with other crops; (3) many vegetable crops, especially those of a more perishable nature are produced in the short space of six to twelve weeks in season; (4) we believe the law of supply and demand will react quickly to adjust shortages and over supplies; and (5) we believe the greatest incentive to planting is the prospect of high prices, and, therefore, a period of shortage will be followed by a period of plenty unless the government sets a price ceiling which robs the grower of the incentive to plant, and, therefore, discourages production, therefore, be it

RESOLVED; that the Pennsylvania Vegetable Growers' Association is opposed to any type of government price fixing of vegetable crops or regulation or restriction which would interfere with the growers' complete freedom in selecting, producing, and marketing the crops which in his opinion, possibly because of soil or climate, labor supply, or nearness to market or other factors, enable him to produce with the greatest efficiency.

January 13, 1943

TO—The Hon. Donald Nelson, Director, War Production Board, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—MACHINERY.

WHEREAS; (1) farmers have been requested to maintain food production in the face of a shortage of labor and other supplies; and (2) machinery can be used to a great extent to offset the shortage of labor, therefore, be it

RESOLVED; that every effort be made to grant adequate priorities of materials to manufacturers of trucks, tractors, and machinery for farm use, and sufficient spare parts to adequately maintain present farm equipment.

January 13, 1943

TO—The Hon. Prentiss Brown, Director, Office of Price Administration, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—GASOLINE AND TIRES.

WHEREAS; gasoline and tires are extremely necessary to the average vegetable grower both for production and marketing, therefore, be it

RESOLVED; that gasoline and tire ration boards be directed to grant supplementary rations where regular allotments are inadequate to carry on the business.

January 13, 1943

TO—The Hon. Donald Nelson, Director, War Production Board, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—SALVAGE OF CONTAINERS.

WHEREAS; restricted manufacture of packages and baskets has resulted in a scarcity of containers for vegetables, therefore, be it

RESOLVED; that the Pennsylvania Vegetable Growers' Association requests the container Division, of the War Production Board to get out publicity to inform consumers, produce stores, dealers, and commission merchants of the importance to prevent destruction of used packages, and to encourage the saving and collection of containers that may be satisfactorily reused in order that they may be repurchased by growers.

A copy of a press release, issued on December 22, 1942, was sent by Charles L. Sheldon, Director, Containers Division, War Production Board, Washington, D. C., in reply to the above resolution.

PHONE. CORNWELLS 0421

CARGO INSURANCE

Wm. H. States, Jr.
PRODUCE HAULING

R. D. 2, Bristol, Penna.

January 13, 1943

TO—The Hon. Paul V. McNutt, Director, War Manpower Commission, Washington, D. C.

COPY TO—The Hon. Claude R. Wickard, Secretary of Agriculture, Washington, D. C.

SUBJECT—LEGISLATION FOR 54 HOUR WORK WEEK.

WHEREAS; (1) serious losses of labor both to industry and to our armed forces have been suffered on the farms of America; (2) women and children have been pressed into service on farms working long hours to maintain food production; (3) labor leaders and certain government officials seem to fail to appreciate the seriousness of the farm labor shortage, and are not awake to the fact that because of the shortage of labor, machinery, and supplies on farms, our country is threatened with a serious food shortage; (4) and we believe that increased production in factories can be met by present workers, rather than further depleting farm labor in the face of a food shortage, therefore, be it

RESOLVED; that the Pennsylvania Vegetable Growers' Association recommends that labor unions be requested to extend their normal work week to 54 hours to meet the present emergency.

In reply to this resolution Mr. Paul V. McNutt, Chairman, War Manpower Commission stated on Feb. 20, 1943 that "An extension of the workweek in industry involves a great many complicating factors including the problem of price ceilings."

"I can assure you," Mr. McNutt continued, "that whenever it appears to be necessary and practicable, we will take appropriate action to extend the workweek."

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Also SPANCROSS, MARCROSS, CARMELCROSS, and limited amounts of WILSON.

Write for descriptive list for home and market growers.

HUNTINGTON BROTHERS

Box H, Windsor, Conn.

February 17, 1943

TO—Members of the Pennsylvania State Legislature.

SUBJECT—LABOR FOR GROWING AND HARVESTING VEGETABLE CROPS.

A resolution was presented and passed, unanimously, at the Ten-Ton Tomato Club Meeting attended by 600 growers in Lancaster, Pa., February 10, 1943, that the points outlined below be enacted into law for the present emergency.

Senate Bill No. 34 produced by Senators Homsher and Wilson under date of January 19, 1943, and referred to the Committee on Education under date of January 20, 1943, provides, among other things:

1. That whenever the School Laws of the Commonwealth of Pennsylvania shall interfere with the successful prosecution of a war in which our Nation is engaged, the local Board of School Directors, subject to the approval of the State Superintendent of Public Instruction, has the power to suspend all present and existing school laws which are inconsistent.
2. The Bill provides that the local Board may close the schools of the district such days and number of days per week as they shall feel are necessary or desirable.
3. It provides that when the schools are closed by the local Board of School Directors as an emergency measure, or when the Governor or State Superintendent of Public Instruction closes them, that the days do not have to be made up but are counted as taught.
4. It permits the local issuing officer to grant farm and domestic employment permits to pupils who are fourteen years of age without any "red tape."

From: The Resolutions Committee—

Emerson Kane, Washington Boro, Pa.

Wm. Stanton, Lititz, Pa.

John Shenk, Federal Bldg., Lancaster, Pa., Chairman.

The following reply was received to this resolution:

February 25, 1943

Dear Sir:—

In response to a letter from the Resolutions Committee dated February 17th, I wish to state that I am greatly interested in the Legislation referred to by your group and I can assure you of my sincere effort to help in the passage of this Legislation when it reaches the House.

I am always happy to receive your comments on legislative matters.

Very truly yours,

FRANKLIN H. LICHTENWALTER
Majority Leader

Growers Protest Subsidy Program

Members of the Philadelphia Vegetable Growers' Cooperative Association, attending their annual meeting, went on record against subsidies to vegetable growers and price ceilings of fresh vegetables. In the opinion of the 100 members in session on January 26th at Torresdale, the subsidy program announced by Secretary of Agriculture Wickard and the ceiling prices not yet announced will do more to discourage growers from meeting the required goals than the shortage of labor, fertilizer, machinery, and containers.

The proposed subsidies for a grower producing 100 acres of essential vegetables might net that farm \$5 per acre at the end of the season. The proposed price ceiling would prevent the vegetable producer from having a free chance at the war worker's increased income. Each member of the association reported that more than one worker had left his farm in the last year to work in some form of industry.

The subsidy program as recently announced would be costly to administer and would take manpower more needed in essential war activities.

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Vegetables to Feed The World

By Porter R. Taylor
General Manager, Cooperative Fruit & Vegetable Association

AN ABSTRACT

The American vegetable industry has been asked not only to produce a record volume of its product for domestic consumption in 1943, but also to provide 2,000,000 tons of vegetables and potatoes to serve as raw material for dehydrated products which will be used by the armed forces overseas and for distribution in programs of relief and rehabilitation. Thus, the vegetable industry is being asked not only to produce the largest volume ever produced for the American market, but to add on a substantial quantity for export, outlets which have previously never been developed.

Domestic employment has reached the highest level ever attained and consumer income has been so great that it has been necessary to invoke price ceilings for most commodities in order to prevent excessive prices, especially in those instances where a substantial portion of the total supply has been absorbed from commercial channels for governmental purposes. Unfortunately, the level of vegetable prices which prevailed during the latter part of the past decade was relatively low for vegetables as compared with other commodities.

Shortage of labor will undoubtedly be the most important single hindrance to the increased production of food during the coming season. There must be a more effective solution of it than now appears probable if we are to maintain and increase total farm production.

The latest estimates are that the average work in all American industry is 42½ hours per week as compared with 56 hours in Great Britain. It would appear obvious that the quickest and most effective way to increase the total productive capacity of all workers in this

LANCASTER BONE FERTILIZER CO. Inc.

Quarryville, Pa.

Manufacturers of "Conestoga Brand" fertilizers

Made in Pennsylvania for Pennsylvania soils.

country would be to make a substantial increase in the average number of hours per week which workers are actually employed. An increase in the average number of hours of work per week in this country to the British standard would enlarge the total amount of our productive effort by about one third. Such an increase would quickly release from industry a portion of those who have left the farms previously and who could return without the need for further training.

To a very large degree each local community must solve its own labor problem if it is to be done effectively. This includes the shifting of town people into the country at time of harvest as well as the development of school labor for use on nearby farms.

The use of second-hand packages should be encouraged so as to utilize our existing supply to the best advantage.

If we will remember that there is less than one month's supply of new trucks of all kinds available for distribution until manufacture is resumed after the war, perhaps we will realize the seriousness of the situation and the need for the greatest care and conservation.

This increase in production is also being requested in the face of the almost complete absence of new labor-saving machinery and motor trucks, although steps are now being taken to increase the former somewhat. Restricted supplies of fertilizer, spray materials and containers are other problems which do not favor increase in acreage.

Higher costs and decreased efficiency of labor are certain to prevail during the coming season and growers are entitled to protection against such uncertainties if they expand acreage under present abnormal conditions. However, in the absence of an effective labor program, growers can only meet the increased cost of both labor and materials from an increased selling price.

Despite all the errors which have been made and are now being made by those responsible for governmental policy decisions, when planting time comes we will find the American farmer doing his utmost to meet his country's need for food and to make as much available as possible for the stricken peoples in other parts of the world. But the American public cannot expect the farmers of this country to achieve the impossible in production because their capacity to produce has been reduced by the contribution of their labor supply to both the armed forces and industry without replacement from any other source as yet.

Farmers should make certain that every opportunity is utilized to inform the public with regard to the truth of this situation now, rather than at a later date when it will be too late to correct it.

Philadelphia Receives High Quality Sweet Corn

By Charles K. Hallowell and William Yerkes

The sweet corn marketing program of the Philadelphia Vegetable Growers' Cooperative Association was the outgrowth of the determination upon the part of a large retail distributor to furnish his customers with freshly pulled, well-graded sweet corn every day of the season, and also upon the part of a progressive group of growers who were determined to get the highest net return possible from their corn. Both the growers and the distributor were convinced that the public wanted fresh corn and that they were willing to pay a price for it.

With this objective in mind a marketing program was developed which operated in the following manner for the 1942 season. The Philadelphia Vegetable Growers' Cooperative Association transacted all business with the distributor and supervised the grading, packing and transportation for the growers. Corn was delivered daily to 11 retail outlets not later than 10:00 A. M., and all corn was taken from the field the same morning it was delivered. Corn was packed in bushel baskets, 50 ears to the bushel. Grading and packing was supervised by a Federal-State Shipping Point inspector. He saw the corn each morning before it was pulled and all corn delivered to the stores had to meet the U. S. No. 1 grade specifications.

Growers received a seasonal price of two cents per ear, and the distributor paid one half of the cost of the containers and one half of the transportation costs. As a part of the program the distributor advertised this sweet corn as a product of the Philadelphia Vegetable Growers' Cooperative Association, and never sold any corn under this brand after it was a day old.

The program was carried on during a six-week period, from July 28 to September 16. Seventy thousand ears of corn were delivered the first week, and each week sales increased until the sixth week when 106,700 ears were sold. The total for the season was 719,000 ears or approximately 14,380 bushels.

Both the growers and the distributor were well pleased with the program during the 1942 season, and consumer reaction was most gratifying. One of the difficulties encountered was the problem of making deliveries by 10:00 A. M. in the morning, particularly on one or two rainy days. One grower put lights on his harvesting equipment in order to begin pulling corn before daylight.

Growers received approximately 25 per cent more for the corn sold under this arrangement than for corn sold through the regular channels of trade. Growers in the Philadelphia-Bucks County area are looking forward to a similar program during 1943.

Scranton Open Air Market Does The Job

By T. H. Patton and M. S. Ladd

Four years ago the farmers of Lackawanna County who were marketing their products in Scranton faced a problem which had been confronting them for several years. Their retail market, which was located on a street near the river, with inadequate space for displaying produce, had no parking space for customers, no police protection from traffic, and customers were conspicuously absent. The market was operated in the daytime three days a week. With the class of consumers which were then attracted to the market, it was not unusual for a grower to spend the day selling \$10 to \$20 worth of produce.

Growers became interested in establishing their own market. They located a piece of land directly across the river about a quarter of a mile from their former location. This property, located adjacent to a well travelled street and containing 2½ acres of land, made an ideal location for a new market.

When the market opened the first of August, problems again confronted the group. Here were two markets operating one fourth of a mile apart—one in the old location already established and the other in the new location.

Something had to be done so the night market was established; lights were installed; stalls laid out 15' x 30' with a 60' street between, giving adequate space for displays. Advertising was done by newspapers, radio, printed cards and printed bags. With the opening of the first night market a change for the better took place—families came in their cars, parked in protected parking space and bought local produce.

Now as to the management of this market. A board of directors composed of five growers were elected for a term of three years by those who participated in the market. This is further broken down into committees, such as committees on management, finance, grounds, purchasing and advertising. The only source of income is from the rental of stalls, which at the present time is \$20.00 a stall for the marketing period from August to late November.

One indication of the volume of business can best be shown by the amount of bags sold to growers for their use on the market. During 1940—20,000 bags, 1941—42,000, and 1942—93,500 in 5-pound, 12-pound and 20-pound sizes. Although no records of sales are reported to the association, one grower supplied the information on his sales at the market during the past three years as follows:

1940—Approximately \$ 700.00—Gross Sales
1941—Approximately \$2,000.00—Gross Sales
1942—Approximately \$4,000.00—Gross Sales

Vegetable Growers Adopt Price-Ceiling Resolution

Warning that the placing of price ceilings on fresh vegetables at the country shipping point will cause terrific confusion among consumers, retailers and wholesalers, the Northeastern Vegetable and Potato Council, meeting at the Hotel New Yorker, on March 13th, called upon Price Administrator Brown to abandon consideration of any such plan.

In a resolution setting forth its position, the Council pointed out the many variances of costs of production and transportation from hundreds of producing sections make the application of price ceilings on perishables not only impossible but impractical of administration.

"Not only do shipping point price ceilings subsidize long distance transportation but they will also result in a maze of wholesale and retail prices that will add to the confusion bound to result from any price ceiling plan for perishables," declared Karl C. King, a member of the Pennsylvania Vegetable Growers' Association, in submitting the resolution. "If ceilings must be set, they should be applied as close to the consumer as possible so the consumer might always know the current legitimate prices," he continued.

Vegetable growers from ten northeastern states in attendance at the meeting were unanimous in their anxiety and concern about this season's vegetable production in the face of labor shortage and price ceilings.

Presiding officer Henry G. Marquart, grower of Orchard Park, N. Y., reported that vegetable growers are in a whirl as a result of price ceilings and other government regulations.

"The planting season is rapidly approaching and unless the permanent ceilings are announced by OPA at a very early date, and at levels sufficiently high to assure cost of production in the face of the many hazards involved in growing and marketing perishables, growers will be forced to further curtail acreage," he declared.

Ray W. Wenker, President of the Pennsylvania Vegetable Growers' Association, has attended recent eastern OPA hearings on vegetable price ceilings, and is active in all Northeastern Vegetable and Potato Council meetings looking after the interests of the Pennsylvania Vegetable Growers.

Vegetable Insect Control

J. D. Hutchison, Wilkes-Barre, Pa.

Often the time to remedy or control these pests is too late after they have made their appearance. It is in the hands of every farmer, if he is observant, alert and ambitious, to anticipate insect outbreaks.

- 1—Deep fall plowing buries corn borer adults and many other pests.
- 2—Fall clean up of all crop and weed debris and refuse destroys insect eggs, pupa and adults.
- 3.—Rotation of Crops:
 - A—Many insects feed on only one type of crop—So do not plant a related crop nearby—i.e. crucifers, (cabbage, etc.)
Sod webworm attacks primarily sweet corn and field corn, and the pest hibernates in old sod.
- 4—Time of Planting:
Often times we can time the planting to avoid certain damaging insects.
Pea aphid—less severe on early crops.
Corn ear worm—less severe on early sweet corn.
- 5—Proper fertilization and good culture.
 - A—Have a good fertility program laid out, to fit the needs of the crop to be grown.
Organic matter—Sods or Cover Crops, plus a goodly amount of fertilizer sufficient for the particular crops needs.
A weakened plant is more susceptible and has greater difficulty in recovering a pest attack than one of vigorous growth.
 - B—Thorough preparation of soil will expose and overcome many pests.
- 6—Thorough cultivation in summer is essential.
 - A—Many pupae in soil are destroyed by cultivation.
 - B—Weeds are a source of food for the propagation of many young insects—so by good cultivation, weeds can be eliminated.
- 7—Keep areas adjacent to crop fields as free of weeds as possible.
Insects harbor in old weeds as eggs, pupae and adults.
- 8—Be Alert:
There again anticipate:
 - 1—Visit fields frequently.
 - 2—Observe growth of plants.
 - 3—Look for damage to leaves.
 - 4—Look for unthrifty plants.—An unthrifty plant may warn you of an approaching infestation.

Vegetable Insects and Insecticides

J. O. Pepper

The Pennsylvania State College, State College, Pa.

With the vegetable grower many factors may enter into his production. One of his outstanding problems is the control of the hordes of insect foes that attack practically every vegetable crop grown. These crops as a rule are subject to some insect attack from the time the seed is planted until the edible portion is ready for cooking.

During these trying times with most all the world at war it is not unnatural that some of our insecticides and equipment for applying them may become quite scarce or even unobtainable in some instances. We are facing such a situation at present. With this condition in mind it is the writer's intent to give as much information as possible at this time, on insect control to the vegetable growers of Pennsylvania. This information is for the smaller growers as well as our larger commercial growers.

The Insecticide Situation at Present and Some Suggestions For Their Uses

Rotenone: This material had become a standard insecticide for use against many of our vegetable insects. This is clearly shown by the consumption in the United States jumping from a little better than two million pounds in 1936 to a little over six million pounds in 1940. As most people know the larger part of our supply of this material came from the far East. The Japanese have shut this source off and we must now depend on Brazil and Peru. Just now it looks as if we would be fortunate to have in 1943 one-half of our last year's supply. Therefore, such a condition requires us to make the most use of this available material. The writer is of the opinion that the small home gardens and so-called Victory gardens will still depend on rotenone dusts or sprays for control of insects

Use KOLLERS AQUA SOL

for quick starting and vigorous growth

and

KOLLERS HIGH GRADE ANIMAL BASE FERTILIZERS

for bigger production and bigger profits.

KOLLER FERTILIZER CO., York, Penna.

in their entire garden, but use it sparingly and see that it is not wasted. The small and larger commercial grower can make best of use of his small amount of this material on green and lima bean crops and use on other crops only when insects attack them after the edible parts of the plants are exposed.

Within the past year it has also been shown that a one-half per cent rotenone dust gives satisfactory control of most vegetable insects like the Mexican bean beetle and it is probable that the majority of dusts for this year will be made up with this rotenone content. There are some other rotenone dusts that have even less than one-half per cent rotenone but they are bolstered with synthetic organic insecticides and appear to give about as good insect control as the higher percentage rotenone materials.

One may also find several rotenone extracts on the market under various trade names, that are for use as sprays. With these extracts it is suggested that the grower follow closely the manufacturer's recommendations on dilutions.

Arsenicals: It appears that crude arsenic will be made into three materials, lead arsenate, calcium arsenate, and Paris green. Unless some special war demand is made for arsenic it appears that we will have sufficient of the above named materials for our insecticide uses in 1943.

In order to conserve our rotenone supply as much as possible it is suggested that our commercial vegetable growers use either calcium arsenate or lead arsenate dusts or sprays for controlling leaf eating insects on several of their crops. These would include such as leaf eating insects on cabbage and cauliflower before heading; leaf eating beetles on cucumbers; and flea beetles on several crops.

Fluorine Compounds: These are such materials as fluosilicates and cryolites. It is understood that there will be a fair supply of these materials in 1943. They are used to control leaf eating insects and could take the place of arsenicals in many cases. The materials may be used as dusts or sprays. As dusts the usual dilution is one part cryolite to three or four parts dilutent such as talc, clay, cheap flour, etc. As a spray three to eight pounds per 100 gallons water is used.

These fluorine compounds should never be mixed with lime or even sprays such as Bordeaux.

Mercurials: These are materials like bichloride of mercury that we make corrosive sublimate from and the calomels that are used in controlling insects like the cabbage maggot. It appears that we will have about 75 per cent of these materials this year as we had in 1942.

Nicotine Sulphate: Apparently we will have a sufficient supply of this material for insecticide use in 1943. The industry is facing a container problem but they hope to solve this before the season opens.

Pyrethrum: At present there is no definite available information as to the supply of this material for agricultural insecticide purposes in 1943. However, it is very doubtful that there will be very much of it for the above mentioned use.

In general then I believe one can say that the outlook for insecticides to protect our vegetable crops from insects in 1943 is fair, although we should not get too optimistic as certain changes could take place very rapidly and affect the availability of insecticides.

I am sure that our vegetable growers realize how important a part that insect control plays in growing or producing food crops. I am sure that they also understand that all of us must do and utilize every known means of combatting our insect foes and on as economical and practical a scale as possible. Realizing these conditions the following suggestions for controlling insects are made to our growers.

1. Practice crop rotation whenever possible.
2. Clean cultivation of crops.
3. Use proper insecticides.
4. Make correct mixtures or dilutions.
5. Apply timely and thoroughly but do not waste materials.
6. Keep dust and spray machinery in good condition.
7. Estimate amounts of various insecticides needed as early as possible and place your order with some company, but do not horde insecticide materials.

Robson's Hybrid Seed Corn costs a few cents more but what a difference at harvest time. Intelligent corn breeding by our trained men combined with careful growing on our own farms produces Robson's Quality Seed Corn.

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**ROBSON SEED FARMS,
HALL, N. Y.**

in their entire garden, but use it sparingly and see that it is not wasted. The small and larger commercial grower can make best of use of his small amount of this material on green and lima bean crops and use on other crops only when insects attack them after the edible parts of the plants are exposed.

Within the past year it has also been shown that a one-half per cent rotenone dust gives satisfactory control of most vegetable insects like the Mexican bean beetle and it is probable that the majority of dusts for this year will be made up with this rotenone content. There are some other rotenone dusts that have even less than one-half per cent rotenone but they are bolstered with synthetic organic insecticides and appear to give about as good insect control as the higher percentage rotenone materials.

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Note: On three potato test plots the average yield per acre was 147 bushels, none of marketable grade. When only 100 pounds of 65% Manganese Sulphate to the acre was applied on corresponding plots, the yield was 250 bushels of marketable potatoes per acre.

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ATLANTA, GEORGIA LOCKLAND, OHIO

Job and Machinery Adjustment

By Alvan C. Thompson, King Farms Company, Morrisville, Pa.

I. Grower Should Choose Crops Best Adapted to conditions.

Food goals as recently announced by our government, and the classification of vegetables into essential and nonessential groups will bring about adjustments of crop acreages on vegetable farms. When adjusting crop acreage the grower must keep in mind several factors including adaptation to the soil, the labor requirement, distribution of income, and whether or not the equipment he has available can be adapted to increases or changes in production.

II. Efficient Production Practices are Essential to Meet Food Goals.

Our government is asking us to equal the record production of 1942 in the face of less labor, less machinery and less fertilizer. In achieving these food goals growers will need to take advantage of labor saving devices and practices which mean greater efficiency.

III. Greater Efficiency from Fertilizer by Proper Application and Use of Lime.

First in regard to fertilizer application there is plenty of evidence to show that a large part of the value of fertilizer is wasted on many farms through failure to use lime. Lime not only increases the efficiency of fertilizer applied, but also releases stored plant food which has been locked up in the soil, by neutralizing the soil acidity. In a great many cases the 20% reduction in chemical nitrogen, which the government orders, can easily be made up by an application of lime to the soil.

The placement of fertilizer is very important. In general fertilizer should be placed in bands to prevent fixation. The larger part of it probably about three fourths, should be placed at some depth, and a smaller amount used near the surface as a side or top dressing or plant starter merely to get the crop started. Where growers are equipped to band-fertilize and side dress, these methods will greatly conserve fertilizer on wide row crops over the ordinary broadcast method close to the surface.

IV. Good Cultural Practices and Effective Use of Machinery Reduce Costs and Avoid Losses.

It is well to group together crops of a similar type in various parts of the farm, for efficiency in later operations of cultivation, spraying, weeding and harvesting. Growers should avoid planting on soil that is infested with weed seed, any intensive crop that requires hand weeding such as beets or carrots. Wide row and quick growing crops may be planted on the more weedy fields, such as beans, corn

and cabbage, which can be cultivated with big tractors. One should select the best and choicest fields in regard to weeds, stones, slope, drainage, type of soil, and acidity, for the more intensive crops.

In planting it is important to standardize row widths in order to avoid lost time later on by having to adjust wheel treads on tractors, and reset cultivators and sprayers. Multiple row planters and cultivators cut costs and speed up production. Crops such as cabbage, cauliflower, broccoli, sweet corn and lima beans for instance, can all be grown in 36" rows, and beets and carrots in 18" or 20" rows. The grower should choose the row width which suits his tractor and equipment, and then try to group crops such as beets and carrots with the same multiple number of rows to suit the cultivation. For the past two or three years we have been using a method of planting which we call "Unit Planting" or "Bed Planting," and which is adapted to close row or intensive crops. The object is to hang small cultivator tools on one of the small type riding tractors, and cultivate a unit such as four or six rows leaving wider spaces for the wheels to run in. In some cases this eliminates entirely work with the hand wheelhoe or garden tractor.

V. Seed Testing Important to Conserve Short Seed Supply and Save Thinning Cost.

Certain kinds of seed such as carrots, beets and onions are reported short this season. Therefore, it is important that we know the germination test before planting in order to conserve our supply, and that we have seeders which we can adjust to an accurate uniform rate of planting. If we can get the proper stand to come up without thinning we can save a great deal of hand labor. In this connection if we could single our beet seed successfully, as the sugar beet growers are doing, we could eliminate a great deal of hand thinning. It is reported that the University of California has developed a sugar beet seed-shearer which breaks up the seed clusters into single seeds, and that accurate spacing of the seeds in the row practically eliminates hand thinning.

VI. Proper Cultivation Gives Effective Weed Control.

There is just an ideal time for cultivation or planting following a rain when the soil works best. Growers should use weeder attachments whenever possible or separate weeders or rotary hoes to kill weeds when they are small, and thereby avoid costly hand weeding later on. When cultivating it is often an advantage to use dirt shields next to the row which permits much closer working, and faster travel without burying the crop and often eliminates any hand hoeing or hand weeding. There is a type of dirt shield called the "Rotary Dirt Shield", made up of a circle of curved teeth, which I think is especially good.

VII. Insects and Diseases Affect Selection of Crops.

Timeliness in spraying and dusting is an important factor in vegetable growing. A delay of only two or three days may mean ruin or serious damage to a crop by aphids, beetles or worms. Effective insect control means close observation and anticipation in advance, and having the machine set up and ready to go when the outbreak of insects occurs. For fast efficient work the newer types of dusters and sprayers which cover wide swaths across the field represent a big saving in time and labor. Therefore, if a grower is counting on increased acreage of snap beans or lima beans for instance he should have equipment to control diseases and insects which may attack the crop.

VIII. High Labor Cost of Harvest Means Big Possibility for Labor Saving Machinery.

The development of harvesting machinery for vegetables has been rather slow due possibly to uneven maturity and variation in quality. Also, manufacturers have probably not had the incentive to produce harvesting equipment because only a few large growers could afford the investment in expensive harvesting machinery. However, with a great many vegetable crops, much more labor is spent in harvesting than in growing them, which means a greater possibility for labor saving. If satisfactory harvesting machinery were available now it would no doubt greatly increase the production with the present supply of labor. In Lancaster, Pa. they have developed a tomato picking machine which is claimed to be successful. Harvesting machines have also been developed for spinach, lettuce, asparagus and other crops which will no doubt be perfected and produced in quantity when materials become more plentiful.

IX. Maximum Food Production Necessary to Help Win the War.

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VINCENTOWN, NEW JERSEY

Pennsylvania Tomato Growers Report

By Jesse M. Huffington, State College, Pa.

Nearly 500 names of tomato growers (497, to be exact) who produced ten or more tons per acre in 1942 were announced on February 10, at the Pennsylvania Tomato Day program in Lancaster, Pennsylvania, where 600 growers heard discussions of timely problems.

The largest yield per acre was produced by Harry G. John, Bloomsburg, Pa., with an average of 20.03 tons per acre and 68 per cent U. S. number one tomatoes; second, B. L. Shipman, Muncy, 18.8 tons, 79 per cent; third, Rosner Triol, Line Lexington, 18.77 tons, 64 per cent; fourth, Myron Whitenite, Bloomsburg, 18.56 tons, 77 per cent; and, fifth, Joshua W. Beatty, Hatboro, R. D., 17.19 tons and 73 per cent.

Top quality was harvested by J. S. Bassett, Danville, R. 5, with an average of 90 per cent U. S. number one's and 10.62 tons per acre; second, Clinton Shipman, Muncy, 86 per cent, 16.12 tons; third, Joseph T. Reeder, Catawissa, 85 per cent, 17.87 tons; fourth, R. Fred Maier, Watsontown, R. 1, 85 per cent, 12.07 tons; and, fifth, Uriel S. Peachey, Belleville, 83 per cent and 15.57 tons.

Timely topics were discussed by guest speakers, as follows: Efficient production and method of applying fertilizer, Dr. C. B. Sayre, Geneva, N. Y.; Care of southern plants, Dr. W. B. Moore, Tipton, Ga.; Defoliation and fruit rot control, Dr. J. J. Wilson, Bowling Green, Ohio, and Hybrid tomatoes for canning by Dr. D. R. Porter, Riverton, N. J.

A summary of production practices followed by ten-ton growers is published, which emphasizes the following points:

- (1) Long rotations including sod and cover crops, manure or green-manure crops and sufficient lime to grow clover.
- (2) Deep and early plowing followed at once by thorough soil preparation.
- (3) Complete fertilizer, applied liberally (600 to 1200 pounds per acre) and deeply, preferably about two-thirds drilled deeply or plowed down, and an additional light application along side the row.
- (4) Well-grown, disease-free plants, set early and deeply with plant starter used when water is applied and allowing 14 to 16 square feet per plant.
- (5) Clean, careful, close and shallow cultivation, starting within a week after the plants are set.
- (6) Selection, training and supervision of pickers to obtain high quality without waste.
- (7) Hauling only large loads to save labor and materials.

About 50 questions were submitted by the growers, ten of which were accepted by the committee and referred to the proper authorities for answer. They are the following:

- (1) How do southern plants compare with locally grown plants?

Mr. L. D. Fero, Chambersburg, Pa. We have three types of plants—the southern plant grown in Georgia in the field and brought here at planting time; locally grown transplanted plants, started in a greenhouse and transplanted into coldframes; and home-grown plants seeded in coldframes, under muslin and transplanted directly to the field.

If you have exceptionally good plants either source would probably produce a good crop of tomatoes. In our study of the crop we notice that these locally grown frame seedling plants are not quite as dependable as transplants or southern grown plants. In setting up a standard to compare plants, you want a well-grown, sturdy, hardened plant ready to set it in the field just as soon as weather conditions permit. It is hard to get home grown, frame plants early enough. The earlier plants are set when weather conditions are favorable the better the yield you can expect. May 10-20 is the planting date in Lancaster County and if the plant is not ready until the 29th or early in June, it naturally is at a disadvantage. The transplants and southern plants, from our crop record study, show very little difference. The advantage of the transplant is earliness. However, it is a little hard to get a good transplant ready by May 10. The main thing is to have a good plant of any source to use to start the crop.

- (2) Why were plants from Georgia received late last year?

Mr. Fero—The information I have is that weather conditions were unfavorable in Georgia.

- (3) Can a method be worked out to eliminate congestion at the receiving station at the time of unloading?

Mr. Emerson Kane, Washington Boro, Pa.—In some sections truckers are delivering the plants to farmers, so much a thousand being paid to the trucker to deliver the plants from the station. Some farmers are willing to work out a schedule whereby they can come in at an appointed time.

- (4) Would it be practical to have the plants shipped in large trucks?

Mr. Kane—in some cases this has worked out fine, but in other cases the trucks have broken down or been delayed and the plants were injured.

- (5) What recourse has a farmer for an appeal from his mileage allotment?

Mr. Erisman, Lancaster, Pa.—If the farm is unable to get the mile-

age or gasoline he needs, he should apply to the local office of the Transportation Committee.

(5) How can you be sure of getting repairs promptly?

Mr. Erisman—Order your repair parts promptly. I believe that so far there hasn't been too much difficulty in getting repair parts. There is a shortage of new farm machinery and machinery repairs will be needed during the season. Your local dealer should replace parts as used, but everyone should check and repair their farm machinery now and order the needed parts.

(6) Transportation?

Mr. Erisman—We come in contact with a lot of farmers who actually need more gas and more mileage. It certainly shows that there is a dire effort on the part of farmers to cut down on their transportation wherever possible. I believe everything is being done to put farmers on a preferred rating in regards to gas and other things to keep the farm going.

(7) What contact should farmers make in order to keep key men out of the draft?

Mr. Poorbaugh, A.A. Service—Form 64, released by the Man Power Commission and Selective Service, places efficient farm labor on the farm and sets up a unit value for livestock and crops with a minimum of 8 units per man on the farm. For example, one acre of tomatoes is one unit. The Selective Service has those units and anyone desiring deferment of any necessary farm help should go to them and tell them what you intend to do in 1943 and they will compute the units on your farm. The farmer should make his plans and go ahead and plant the crops and worry about getting it harvested later.

(8) How will last year's system of obtaining labor be improved?

Mr. Blank, U. S. Employment Service, 228 E. Orange St., Lancaster, Pa.—We don't know what is going to be done but, regardless, we still want to see anyone interested in local service. If growers tell us early what labor they need I feel sure that we are going to do a great deal better than last season. We cannot guarantee labor for picking tomatoes but will do our best. The Employment Service cannot send out any children under 14 years of age.

Mr. Truman B. Thompson, U. S. Employment Service, Harrisburg, Pa.—The U. S. Employment Service is designing a simplified system for school children to work in agriculture. There are various other agencies in the field of agriculture at the present time and we are receiving records from them to fill the order. The school officials have a definite responsibility, which is educational.

(9) Is the tomato picking machine practical?

Mr. Snavely Garber, Willow Street, Pa.—We feel that we have something to offer. There are four different types of machines in which to suspend the pickers above the rows. One machine is hooked on the side of a truck and extends 24 feet to one side. The latest machine was built by Jacob Harnish, Mt. Joy. It accommodates four pickers and can, also, be used to pick up potatoes.

When the field is wet we usually can go through with chains, particularly after truck tracks are established and the ground becomes solid. Plant the rows further apart, the same as when you spray.

(10) Will school children be released to help pick tomatoes?

A resolution was passed unanimously requesting that local school authorities be empowered to suspend all existing school laws which are inconsistent with the war effort; that local school boards be empowered to close the schools such days as they shall feel necessary and desirable; that such days should not have to be made up but counted as taught; and that local issuing officers be empowered to grant farm and domestic employment permits to pupils who are fourteen years of age without any "red tape." A copy of this resolution was sent to every member of the Pennsylvania State Legislature, the Governor, the State Superintendent of Schools and the Secretary of Agriculture.

ACKNOWLEDGMENT

National Can Company, New York, N. Y., contributed to the support of the 1942 Pennsylvania Ten-Ton Tomato Project sponsored by this Association, cooperating with the Pennsylvania Canners Association.

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Jubilee is entirely different from any yellow or orange tomato. Fruits are bright orange-yellow, globular, weigh about 6 ozs., and quite free from cracking. The interior is modern, thick-walled, with few seeds. The flavor is somewhat mild but not flat. Makes delicious juice of unusual and attractive color. Very high in Vitamins A and C. Fruits of Jubilee are usually ready in about 72 days after plants are set out in the garden.

The plants are short-stemmed, but not determinate, stiff, compact, and cover the fruit well. They also hold their foliage well and bear over a long season. The fruit color develops evenly and uniformly.

Growing Peas for Canning and Quick Freezing

Jesse M. Huffington, State College, Pa.

Large yields of peas will greatly help the food situation. Cool, moist weather and a carefully prepared soil well supplied with organic matter are required for the germination of pea seed as well as growing and harvesting large yields of high quality. Early planting is essential.

The crop generally does best after a well-fertilized, cultivated crop, such as potatoes, tomatoes, sweet corn, or corn. Earlier growth is obtained when liberal applications of manure are applied to the corn, or sweet corn, preceding peas.

Peas are frequently used as a nurse crop for alfalfa, clover or sweet clover.

Deep plowing, early enough for grass and crop remains to decay, followed by deep, thorough discing, is required in preparing a seed bed for good germination and rapid early growth.

A soil well supplied with organic matter is needed so that fertilizer will be utilized, moisture will be available and the plants will continue to grow until maturity.

A common practice is the application of 500 to 800 pounds per acre of 4-12-4 or 4-16-4 fertilizer, applied deeply with the drill, separately and before seeding, plus 10 tons of manure. The fertilizer should be drilled at least three inches deep or applied before plowing. New equipment has been designed for applying fertilizer in the bottom of the furrow. A few growers tried the application of 500 to 600 pounds of 4-12-4 before seeding and 100 to 200 pounds of 20% superphosphate with the seed last year with satisfactory results. However, complete fertilizer never should be applied directly with the seed.

The seed should be inoculated just before planted, drilled about 1½ inches deep and the soil rolled immediately after planting.

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PENNSYLVANIA VEGETABLE GROWERS' NEWS

MARCH, MAY, JULY AND DECEMBER

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Publication of The Pennsylvania Vegetable Growers' Association
President Ray W. Wenker, Bustleton
Vice-President Louis Orient, Bridgeville
Sec'y-Treas. Jesse M. Huffington, 625 Holmes St., State College

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Ask your Neighbor to join your Association or to subscribe to the only publication in Pennsylvania devoted entirely to the production and marketing of vegetables. The dues are only one dollar a year, payable to The Pennsylvania Vegetable Growers' Association, State College, Pa.

Emergency Farm Labor Assigned To Agricultural Extension

President Roosevelt has signed the Emergency Farm Labor Act turning over to the Agricultural Extension Service the responsibility for recruitment, placement, training, and supervision of Emergency Farm Workers.

Emergency Farm Labor Committees have been or are in the process of being set up in each county to advise with the County Agent on plan for this work.

One or more placement offices will be set up in each county depending upon the need. An Emergency Farm Labor Assistant to the County Agent will handle most of the details of the work.

Plans are being made to ascertain the needs of farmers and for the recruitment of more farm youth, women, persons in non-essential industries, "vacationists," and other men and women from towns and cities.

Information as to the program in each county can be obtained from the County Agent or the Emergency Farm Labor Office as soon as it is set up.

The potential supply of farm workers largely consists of untrained persons, boys and girls, men, and women. Industry has had to face the problem of taking untrained persons and training them for the job. Farmers are now faced with the same problem. It will be desirable that they have some kind of training, supplied either by the farmer who hires them or through some plan set up in the county by the Emergency Farm Labor Committee.

When there is a definite need, camps may be made available to house workers. Existing facilities will be used. Many agencies already have offered to be of assistance.

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Penn-Jersey Crop Corps Organizes Labor Pool

George Pfeiffer, III, Chairman

City people in Philadelphia and Camden are now enrolling with the Penn-Jersey Crop Corps to spend their vacations working on farms. This plan was tested last year by the Junior Board of Commerce of Philadelphia, and 385 men and women volunteered. This year a major campaign, launched on Friday, April 30, at a meeting which was addressed by Louis Bromfield, J. E. McCord of State College, and others in the agricultural field, is being supported fully by more than one hundred Philadelphia business organizations. It is expected that more than 10,000 will volunteer.

Last year, 40 per cent of the volunteers turned out to be city people who had been born and raised on farms. Because of this, and because the Penn-Jersey Crop Corps is telling recruits that they face hard work and more blisters than dollars, these volunteers are expected to be of great value.

County Agent Charles K. Hallowell is a member of this committee and reports that plans have been worked out at all times from the farmer's point of view and his needs.

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How To Get Those Harvest Hands

Place your request for farm labor now, is one part of the message being emphasized by the U. S. Employment Service of the War Manpower Commission, according to Truman B. Thompson, Farm Placement Supervisor. *Register with us if you want to do farm work*, is the rest of it. The necessity for shouting both these messages from the housetops becomes clear when you ponder the little incident above. If two men in the same small community can manage to miss each other, while potatoes spoil on the ground, then it's time for action.

Just what the U. S. Employment Service can do for the farmer this season, is something this organization is very anxious to make clear. It can and does serve as a central clearing house. An experienced farm placement representative is now assigned to every local employment service office. If you cannot visit the local U. S. Employment office in your area, telephone or write the local office to have a representative call on you at your convenience to discuss your agricultural labor situation.

Here is the three-way message of the employment service to you, the busy grower of tomatoes, peas, beans, spinach, potatoes or whatever your specialty might be:

1. Estimate your needs, both as to time and the number of workers needed. We realize this estimate depends on the weather so naturally it's conditional and may be changed or cancelled. At the same time, try to estimate carefully. If Farmer Smith feels he can get by with fifty hands, but orders one hundred just to play safe, then has to cancel fifty, his neighbor is apt to lose out in this scarce-labor market, just through this miscalculation.
2. Give inexperienced hands a break in your own mind. The high school students will no doubt be supervised by trained older agricultural workers who'll instruct them how to pick and keep their high spirits in check. Considerable numbers of the men and women in the U. S. Crop Corps now being recruited by civic and service clubs have had farm experience. The plan calls for enrolling them in their own communities. Many a wife was a farm girl, many a business man once a farm boy.
3. Both high school boys and girls (voluntarily enrolled by the employment service in cooperation with local school authorities) and members of the U. S. Crop Corps may be secured through the U. S. Employment office in your county.

GET THE FACTS And You'll Get Protection

THIS FREE BOOKLET tells you how to protect your income against loss from hail damage to crops. You owe it to yourself to get the facts. Hail is three times more hazardous than fire, average U. S. figures show. And, no section of the country is immune.

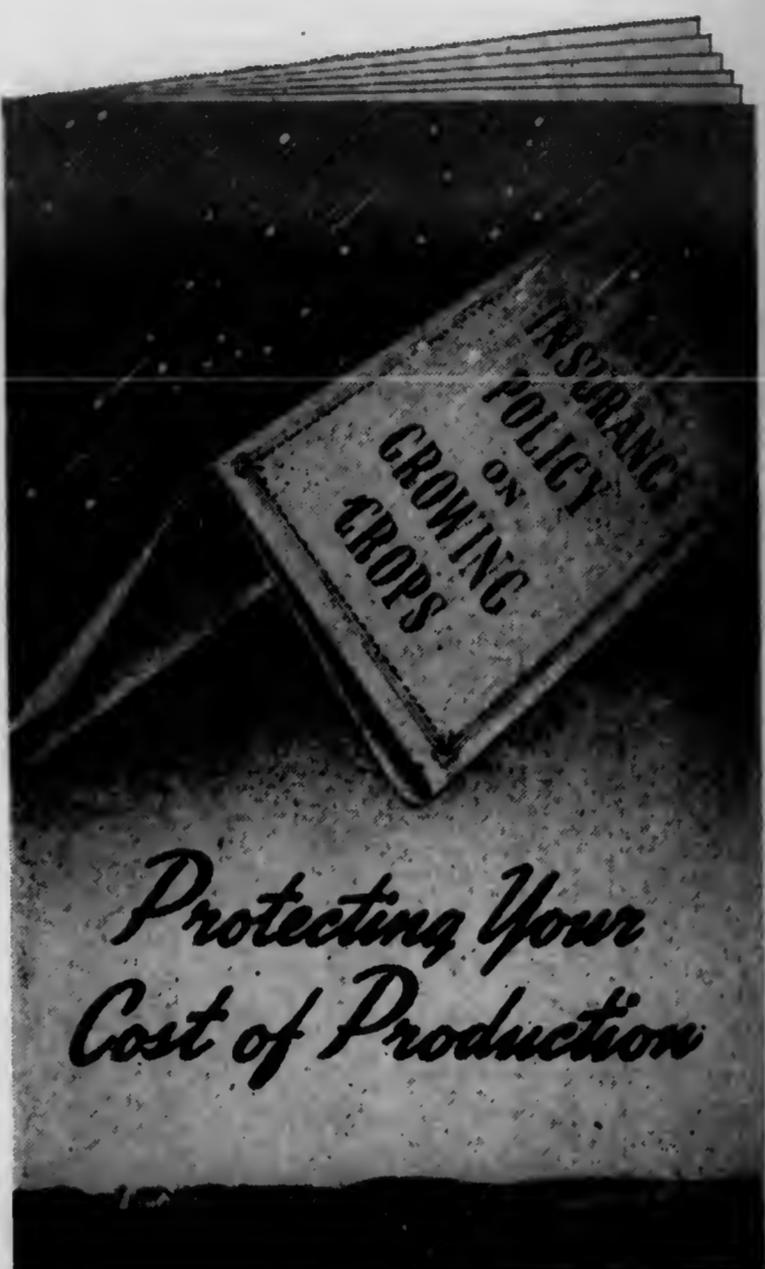
You can't prevent hail, but you can prevent loss. Find out about the moderate cost of Hail Insurance. Send for this FREE booklet today. It contains a simple explanation of Hail Insurance and tells you how losses are adjusted and damages computed.

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George School Conducts Summer Farm Camp

T. Sidney Cadwallader, II, Director

As a small drop in the Agricultural Labor Bucket, George School is conducting this summer a farm camp for 100 high school boys over 14 years of age. The camp will supply primarily vegetable growers in the lower Bucks County area and will be open from July 10 to September 4.

The boys will live in one of the dormitories at George School and will be fed in the school dining room at a cost of \$10 a week which will include also accident insurance. They will have the use of the swimming pool, tennis courts, playing fields. Nearby farmers who need help will call for the boys in the morning and return them in the evening. The boys will work 8 hours a day, 6 days a week, under adult supervision, and will receive the regular farm wages. Already farmers in lower Bucks County have indicated that they will need all of these boys, but should there be any surplus, King Farms located nearby has stated that they will take up the slack.

The plan appears popular with the boys and already twice as many boys as can be accommodated have applied. This means that the camp will be highly selective and farmers will be sure that they will get boys who are willing to put in a hard days work to relieve the critical labor shortage. On the other hand the educational and recreational programs should keep the morale of the boys high. It is hoped that this camp will set standards for other school camps.

Your Market Growers' Journal Subscription

By special arrangement with Dr. H. D. Brown, Secretary of the Vegetable Growers' Association of America, each member of our State organization is to receive the Market Growers' Journal this year. This arrangement is made possible because of our affiliation with the National organization and greatly reduced rates on account of the large number.

"However," says A. R. Junginger, Editor of the Market Growers' Journal, "the shortage of help in this office has slowed things up greatly and we are far behind in our work. We anticipate, however, that all Pennsylvania members will be on the lists by the June issue. We are doing our best under the present conditions and hope you will bear with us."

Making The Best Use Of Available Fertilizers

W. B. Nissley

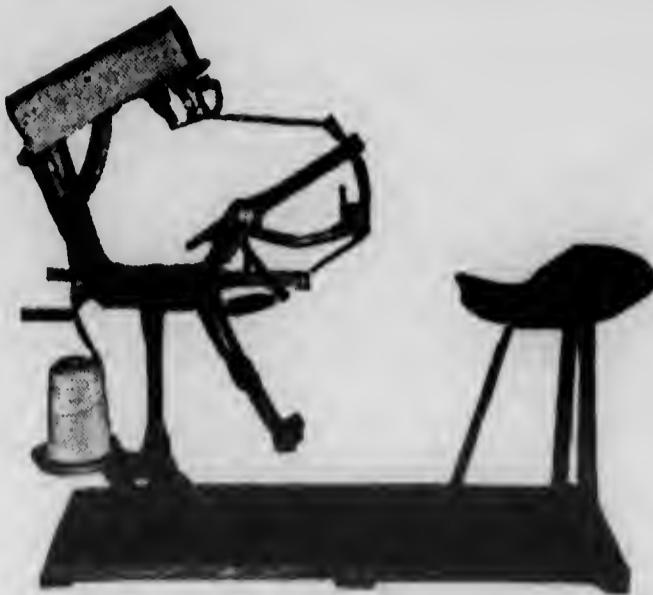
Vegetable growers need rapidly growing cover crops such as domestic ryegrass seeded in late July to early September between rows of cultivated crops (20 lbs. per acre). This is used more than any other cover crop and forms a light sod to be turned under in the spring. Rye may be substituted later in the season but does not form as fibrous a root system as ryegrass. When more time is allowed for a green crop a legume such as clover or vetch can be grown adding nitrogen to the soil in addition to organic matter.

Liquid fertilizer or starter solution is economical since it does not require much material, it is also quickly available to plants and results in earlier maturity.

A stock solution may be made by taking one pound of a complete fertilizer to 1 gallon of water and allow this to stand for at least one hour or over night. Stir the material frequently. To each gallon of stock solution add 4 gallons of water when used in transplanting. Pour one-half pint or a cupful of solution in the hole similar as is done when watering at transplanting. When used in the seed row take 1 gallon of stock solution to 10 gallons of water and apply 1 quart to 10 feet of row in the seed furrow.

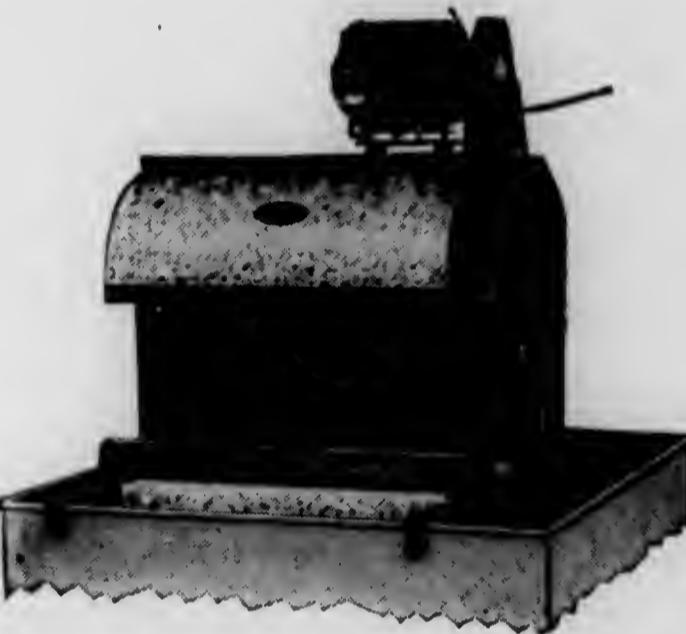
Since nitrogen is more difficult to secure than phosphorus or potash and also more quickly lost for crop use, one should use manure wisely and try to prevent its escape. Fifty pounds of 20 per cent superphosphate per ton of barnyard manure will make a well balanced fertilizer for most crops. One hundred and twenty-five pounds of superphosphate per ton of dry poultry manure will do the same. In addition the superphosphate will reduce nitrogen losses by absorbing moisture.

The scarcity of commercial fertilizers in 1943 is causing many growers to change their method of fertilizing from broadcasting to plant and row application in which case the fertilizer is placed near the plant or row and as deep as possible. This is commonly called band application and considered more economical. The more recent practice of plowing under fertilizer shows that this method is superior where it has been tried experimentally in New York, New Jersey and one year in Pennsylvania. One method is to broadcast the fertilizer before plowing and then turn it under. A better method is to place the fertilizer in bands on the bottom of the furrow. Efficient machinery for doing this is not available commercially but the practice seems to be sound. Experiments show that plowed down fertilizer produces largest total yields but maturity is later than row applications.



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Some Timely Vegetable Insect Notes

J. O. Pepper

Cabbage Worms

It is important to protect cabbage from worm damage because of the need for increased production in 1943. Cabbage worm control can be accomplished even though the grower is not allowed to use rotenone on this crop.

Insecticides that may be used on cabbage are as follows: As Dusts—Calcium arsenate should be applied undiluted; Paris green diluted with 9 parts, by weight, of hydrated lime; Cryolite diluted with equal parts of talc; and Barium fluosilicate diluted at the rate of 3 parts to 1 part of talc.

As Sprays—Calcium arsenate, Cryolite, and Barium fluosilicate should be used at the rate of 3 pounds, and Paris green at the rate of $\frac{1}{2}$ pound to 50 gallons of water.

None of the above materials should be used on cabbage after the heads begin to form, which is usually about 30 days before harvesting starts, unless it is known that removing the outer leaves will remove any harmful residue.

If worms are still a problem after the heads are forming a dust or spray mixture containing pyrethrum will give fairly good control of cabbage worms. Dust mixtures should contain at least 0.2 per cent of total pyrethrins. Sprays should contain about 1 ounce of freshly ground pyrethrum flowers in each gallon of water. If pyrethrum liquid extracts are used be sure to dilute according to manufacturer's suggestions.

Cabbage Maggot

Apparently this insect will be fairly abundant this year and can reduce cabbage yields greatly. This insect can be controlled by the use of corrosive sublimate, which is, one ounce of mercuric chloride dissolved in 10 gallons of water. One gallon of this material will treat about 50 transplants of cabbage.

If a grower prefers a dust treatment then 1 pound of calomel can be thoroughly mixed with 20 pounds of hydrated lime, gypsum or talc. This can be applied with a plunger type duster and the soil about the base of the plant should be covered with the dust mixture.

Mexican Bean Beetle

The most practical control for this insect on beans appears to be rotenone dust. This material may be purchased now at $\frac{1}{2}$ per cent rotenone content. On early crops of beans the first application should

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be applied when the bean plants have 4 to 6 leaves and usually 2 more applications will protect this crop. On late bean crops a larger number of applications will be required to hold this insect under control. Be sure to cover the undersides of the leaves thoroughly when making these dust applications.

Flea Beetles

Such plants as tomatoes, peppers, eggplants, etc. are sometimes seriously damaged by these tiny beetles just after the plants are set in the field. Some of this injury can be avoided by either spraying the plants with an arsenical while in the cold frames and a day or so before transplanting to the field. Another method is dust the plants immediately after they are planted in the field with either an arsenical or rotenone dust.

The vegetable growers always have many insect problems and if information on these pests are desired they should get in touch with the County Agricultural Extension Association Office which is located usually in the Post Office Building or Court House at the county seat.

Timely Suggestions On Disease Control

O. S. Cannon

To prevent disease spread and resulting poor stands and yields, plant all shipped plants as soon as possible after they are received. When plants arrive, the center bundle should be removed, so that air can circulate among the plants.

If they must be stored because of unfavorable weather at the time of receipt, they should be removed from shipping containers immediately and placed in long furrows with the plants about an inch apart. Water should be applied to the roots but not to the foliage.

Cabbage diseases, such as clubroot, yellows and leaf blight often are carried to new fields on plants. To avoid having the soil on your farm contaminated with these disease causers, be sure the plants you transplant come from disease-free soil. If there is only one plant with clubroot in a whole seedbed, reject all plants from that seedbed, because they will likely spread clubroot to all parts of your field.

Avoid using manures from animals which have been fed diseased cabbage on land where cabbage and related crops are to be planted. During 1942 clubroot destroyed several plantings of cabbage on soil which had been fertilized with such contaminated manure.

Do not apply any copper or any lime-containing sprays or dusts to tomato plants for a period of four days before or after transplanting. These materials cause rapid loss of water from the leaves and the death of many plants that would otherwise grow.

Canning Crop Suggestions

Canning crop recommendations for 1943 have been received from New York State and much information in them is of value to Pennsylvania growers.

Emphasis is placed upon the value of time in the use of men, truck, and equipment. Time schedules for growers to arrive at the viney station with peas or at the factory with loads of tomatoes, beans and other crops were worked out by many canners the last two years, resulting in the saving of many hours every day of both men and trucks just waiting in line to unload. Naturally, it takes the co-operation of the grower and canner to work out an efficient time-saving program.

Sweet corn—Variation in the size of seed from 91 to 205 seeds per ounce of Golden Cross in 1941 and 110 to 175 in 1942 emphasize the necessity of seed grading before planting. Too much seed is planted per acre generally, resulting in labor lost in thinning, poorly filled ears, lower yields, and lower quality. A minimum of 12 inches in the row should be allowed.

Tomatoes—Stokesdale produced the highest yield per acre the last five years, showing that this variety has promise in the high altitudes and cool areas of this state.

Platform Dump Trucks—Simple and inexpensive platform dump trucks may be constructed without, in any way, disturbing the regular framework or structure of the truck or its platform. A second platform is built of planks. It operates on rollers laid on the regular platform. This permits its being put on for use a few hours and then in a few minutes' time taken off and put out of the way. The cost is very small and there is no priority or special equipment needed. Details on construction are available.

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Grow Ten Tons of Tomatoes Per Acre

The Pennsylvania Ten-Ton Tomato Club is reported to have done more than any other thing to increase profitable yields of high quality tomatoes in this state. In eight years the average yield per acre has been increased, in comparison with an adjoining state, approximately one ton per acre.

Plan now to produce more than 10 tons of tomatoes per acre with over 60% U. S. number one grade. These are suggestions:

1. Keep track of the acreage, date of planting, fertilizer used, per cent stand, manure and lime applied and the rotation with cover crops.
2. Set plants carefully, deeply and promptly, using plant starter when water is applied.
3. Keep down weeds and grass with sufficient cultivation.
4. Keep a record of all tomatoes sold to the local trade. Your canner will keep a record of tomatoes delivered to him.
5. Select the best pickers you can possibly obtain, train and supervise them with patience and consideration and pay in accordance with the results obtained.
6. Additional records on production practices will be useful, if time permits, but remember that total food production is the first essential now.

Food is essential to success in the war and in establishing and keeping the peace. Hungry mouths the world over will be fed by the food you produce on your farm.

Achievement records on other crops, also, are desirable in order to measure our progress and avoid unprofitable practices in the future. The record form on the following page may be useful to you. Additional record forms may be obtained from your County Agricultural Extension Agent. These should be returned to him by November 1.

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KOLLERS HIGH GRADE ANIMAL BASE FERTILIZERS
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TOMATO PRODUCTION PRACTICES 19....., County.....
Name..... Address..... Canner.....
Soil: Acres..... Type..... Drainage..... Fertility.....
Rotation followed.....,
Winter Cover Crops before..... and after tomatoes.....
Plowing Date..... Depth..... Condition.....
Tons or Loads of Manure Applied..... Kind.....
Lime Req., Tons.... or pH.... Tons Applied.... Kind....
Fertilizer: Analyses..... Amounts..... Plant Starter.....
How Applied.....
Plants: Varieties..... Preference..... Seed Treatment.....
Southern..... Local Field..... Greenhouse..... Frame.....
Condition and Care of Plants..... Held.....days
Times Sprayed/Dusted..... Materials..... Lbs....
Planting: Date..... Method..... Depth..... Stand.....
Spacing...x...ft. Water applied..... Cut Worm Bait....Lbs.
Replanted, days after planting..... Plants used.....
Sprayed/Dusted..... times. Materials..... Lbs.....
Cultivation:
Times Double... Single... Deep or Shallow... Hand Weeded..
Picking: Began..... Peak..... Ended..... No. Baskets.....
Pickers: % Family..... Hired..... Rate of Pay.....
Hauling:
Hired at\$.....ton. Own Truck..... Av. Load.....
Mi..... Hours.....
Yield: Cannery, U. S. 1s..... at \$.....
2s..... at \$..... Culls..... Total \$.....
Local Market Sales..... \$..... Total \$..... \$.....
Equipment Required in Growing the Crop.....

More Profitable Sweet Corn Yields

Commercial sweet corn seed sizes vary from 110 to 175 seeds per ounce. Most sweet corn growers obtain an uneven stand (with too many plants) on account of this variation in the size of kernels and the use of plates made for field corn. The grading of sweet corn seed before planting will not only result in a more even stand but will save labor, increase the yield per acre and improve the market quality.

Golden Cross Bantam is the standard yellow hybrid variety, maturing in about 90 days, producing a medium-sized ear of excellent quality. Carmelcross matures in 75-80 days and is excellent in quality. Lincoln, Whippcross and Sencross are thick eared varieties of good quality maturing in about 85 days. Ioana is similar to Goldencross, not quite so high in quality but much more productive in a hot, dry season. Golden Hybrid is sometimes used for canning.

Early Evergreen, Stowell's Evergreen, Narrow Grained Evergreen, and Little 8-Row are late maturing white varieties. Silver Cross Bantam is a white hybrid of excellent quality, medium in size. Special hybrid Evergreen selections are now available.

Fertilizer—As much as 200 pounds of 4-16-4, or a similar analysis of commercial fertilizer, may be applied directly in the row with the planter. A 3-12-6, or similar analysis, may be used, instead of 4-16-4, on light sandy loam soils. Up to 400 pounds per acre may be applied in parallel bands about 2 inches deep and 1½ inches from the seed, which is accomplished with some of the newer fertilizer attachments. A larger application of fertilizer should be made on light sandy loam or shale soils of low fertility, drilled deeply (or plowed down in the bottom of the furrow).

Planting—Special plates should be obtained for small-seeded hybrids to avoid thick planting. An average of at least 12 inches between plants is required on most soils for the production of a large percentages of well-filled marketable ears, excepting early market varieties.

Cultivation—Just before the corn appears above ground small weeds may easily be killed and the crust broken by the use of a weeder. If care is used the weeder may sometime be used a second time, after the corn is one to two inches above the ground. Shallow cultivation, just deep enough to control weeds, should always be the rule.

Thinning—Thin to an even stand as early as possible. Suckering is not generally considered necessary with sufficient space allowed between plants.

Better Bean Production Practices

Early plowing is necessary to give sod or crop remains a chance to decay. Following with a disk or harrow to prepare a fine, mellow seed-bed will kill germinating weeds.

Where the soil is fairly fertile or manure has been applied liberally, 4-12-4, 3-12-6, or 4-16-4 at the rate of 400 - 600 pounds per acre usually is sufficient. Without manure a 3-12-6, 4-12-8 or 4-10-5 may be applied at the rate of 600-800 pounds per acre. On sandy loam soils, 800-1000 pounds per acre of a 4-12-8, 4-10-5, or 4-10-10 is suggested.

A safe method is to drill the fertilizer deeply before planting. Row applications give best results when applied in bands one inch from the seed and two inches deep. When only a small amount of fertilizer is available, such as 150 to 300 pounds per acre it would be much more effective applied this way than broadcast. When the grain drill is used for seeding the two drill teeth may be tied close enough together to bring them within 2½ to 3 inches from the seed row, but a corn or bean planter usually is equipped to do the job of seeding and fertilizing more satisfactorily.

Snap Beans

Giant Stringless Greenpod is a high yielding round podded variety adapted to local markets, canning and quick freezing. Tendergreen and New Stringless Greenpod have smaller, straighter pods.

Round Pod Kidney or Brittle Wax is well suited for quick freezing market and canning.

The early crop of snap beans usually is planted in May as soon as the soil warms up and dries out sufficiently for germination; and all danger of frost is past. One inch usually is a sufficient depth to plant. One bushel (60 pounds) of Giant Stringless Greenpod or other variety with similar size will be required per acre. Seed spacing should be two inches apart in the row.

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The first cultivation should be close to the row and as soon as the bean rows can be followed. Later cultivations should not be so close to the row, and shallow to avoid cutting off feeding roots which lie close to the surface. Avoid cultivating or working among the beans when the vines are wet.

The pods are harvested before they are full-grown and when the seeds are beginning to swell. Frequent clean pickings increase yields and improve quality. Only beans which are fairly young and tender showing no advanced seed formation and free from insects, diseases or decay should be delivered to the market.

Lima Beans

Fordhook bush lima is grown most generally but Henderson and other small-seeded varieties are grown for canning. Baby Potato, Early Baby Potato, Maryland Thick Seeded and other selections are small-seeded varieties thick and darker green in color than Henderson. Early selections of Fordhook are now being introduced.

The seed is planted late in May or in June in rows 2½ to 3 feet apart and usually drilled 3 to 5 inches apart. Planting not more than about an inch deep is good practice. From 45 to 75 pounds of seed are required per acre, depending upon the size of seed.

The pods are picked as soon as they have become fairly plump and before they begin to turn yellow.

Field Beans

The culture of dry shell beans is similar to that of snap beans. They are harvested as soon as a large percentage of the pods have matured. Bean harvesters are used where the crop is grown extensively. Two rows of plants are cut at the same time and thrown together in one row. The vines are left in the windrow or placed in small heaps and left for several days to cure. As soon as the beans are cured they are hauled to a barn and stored until threshing time. A special bean thresher is required to do this operation satisfactorily.

Field beans are ordinarily planted in June using 30 to 45 pounds of seed per acre of small seeded varieties (Pea), 60 to 75 of the medium (Red Kidney) and 90 to 100 of the large (White Kidney, White Marrow) when planted in 28-inch rows.

Red Kidney is better adapted to cold, wet, heavy soils than any other type. White varieties (White Marrow and White Kidney) are more subject to weathering and the market demand for the Marrows and White Kidneys are very limited. Pea beans (vining types) are best adapted to drier areas.

Better Set of Lima Beans With Plant Hormones

E. M. Rahn

The spraying of lima beans with a plant hormone to prevent the premature dropping of blossoms and pods looks promising after two years of experimenting. In 1941 an increase of 18 per cent and in 1942 an increase of 6 per cent in yield was obtained by the use of a 0.001 per cent spray (10 parts per million) of alpha-naphthylacetamide, the same chemical that is used to make apples "stick" to the trees in the fall. More experimentation is necessary, however, under different climatic conditions, especially in a hot and dry season when there is abundant dropping of pods and blossoms. Three weekly applications were made during the blooming season with this spray. This plant hormone may be purchased in the pure form or in combination with some diluent under a trade name. A spreader should be used to get a uniform film on the plants, especially on the flowers and small pods.

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Boettcher, Ernst, York, R. 4, Pa.
Boll, David, Manheim, R. 2, Pa.
Bollinger, Edward, Lititz, R. 1, Pa.
Bond, George L., Breinigsville, R. 2, Pa.
Bortner, John L., Hanover, R. 2, Pa.
Bowman, Ivan M., Mohnton, R. 1, Pa.
Bowman, J. Oscar, Myerstown, R. 2, Pa.
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 Pa.
 Brehm, F. C., Dilltown, Pa.
 Brehm, Raymond, Johnstown, Box 80, R.
 1, Pa.
 Breneman, J. W., Willow Street, R. 1, Pa.
 Brickajlik, John, Sellersville, R. 1, Pa.
 Bricker, J. R., Brodbecks, R. 1, Pa.
 Brillhart, Geo., Spring Grove, R. 2, Pa.
 Bringman, J. H., Hanover, R. 3, Pa.
 Brough, P. E., York Springs, R. 1, Pa.
 Brown, Thomas S., Westtown, Pa.
 Brubaker, Isaac M., Lititz, R. 2, Pa.
 Bruckhart, Graybill G., Manheim, R. 1,
 Pa.
 Brumgard, William, Hanover, R. 3, Pa.
 Buchen, Ben, Manheim, R. 1, Pa.
 Bucher, J. B., Lititz, R. 2, Pa.
 Buckwalter, David R., Lititz, R. 3, Pa.
 Buckwalter, Quentin, Lititz, R. 3, Pa.
 Bunting, Fred, Langhorne, R. 2, Pa.
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 Burger, Elmer, Honey Brook, R. 2, Pa.
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 den, N. J.
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 Carl, J. E., Hanover, R. 3, Pa.
 Carter, Edward, Manheim, R. 3, Pa.
 Carter, J. W., Newtown, Pa.
 Cashman, Elmer, York Springs, R. 1, Pa.
 Chestnut, Frank K., Morrisville, R. 1, Pa.
 Chicchia Bros., Bristol, R. 2, Pa.
 Clapper, Dewey, Dillsburg, R. 2, Pa.
 Clark, Fred A., Mars, Pa.
 Clark, Wm. S., Jr., State College, Pa.
 Clemson, Leonard G., Halifax, Pa.
 Cohen, Reuben, Neshaminy, Pa.
 Collins, Charles E., 301 Cherry Street, Dun-
 more, Pa.
 Comly, R. R., N. M. Comly & Son, Bustle-
 ton, Pa.
 Comstock, K. M., American Cyanamid
 Company, 30 Rockefeller Plaza, New York,
 N. Y.
 Cool, J. E., Spring Grove, R. 2, Pa.
 Coon, F. H., Clarks Summit, R. 2, Box 106,
 Pa.
 Cornell, Leigh P., Grand View Farm,
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Daegan, Jesse, Hanover, R. 3, Pa.
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Davis, James J., 519 Northampton St., Kingston, Pa.
Davis, H. E., E. I. DuPont De Nemours & Company, Wilmington, Delaware.
Deardorff, Jacob R., Hanover, R. 3, Pa.
DeCamp, F. P., Mercersburg, Box 144, Pa.
DeLashmutt, W. F., King Supply Company, Morrisville, Pa.
Denlinger, Paul B., Ronks, R. 1, Pa.
Denny, Gray L., Beaver Falls, R. 2, Pa.
Detwiler, C. L. & Son, Hatboro, R. D., Pa.
Dick, Scott A., Dillsburg, R. 1, Pa.
Diehl, LeRoy D., Spring Grove, R. 1, Pa.
Dietz, Howard S., Hanover, R. 3, Pa.
DeGiroldo, Joseph, Eddington, Pa.
Doan, Duane D. and Marcus P. Doan, Yardley, R. 1, Pa.
Doan, Elmer and Harry C. Doan, Woodbourne, Pa.
Dohner, C. G., Manheim, R. 1, Pa.
Donaldson, R. B., State College, Pa.
Dubs, Roy, Hanover, R. 3, Pa.
Dudley, H. N., Red Lion Rd., Torresdale, Philadelphia, Pa.
Dudley, Oliver P., Torresdale, Pa.
Dunlap, R. Bruce, 3125 Chestnut St., Camp Hill, Pa.
Dusman, George, Hanover, R. 2, Pa.
Dusman, J. W., Hanover, R. 2, Pa.
Dusman, Leroy, Hanover, R. 2, Pa.
Dutweiler, Ira K., 36 No. 8th Street, Lebanon, Pa.
Dybiak, Stephen, Sellersville, R. 1, Pa.
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Eisenhart, Clark, York, R. 4, Pa.
Eisenhart, Mrs. Jacob C., Sunny Hill, York, R. 1, Pa.
Elmer, Sterling, Lancaster, R. 6, Pa.
Elston, Charles H., Elverson, R. 2, Pa.
Elwyn Training School, Elwyn, Pa.
Emert, Donald G., Quakertown, R. 2, Box 126, Pa.
Enders, J. Harry, Lancaster, R. 1, Pa.
Erb, Roy B., Lancaster, R. 3, Pa.
Ercolani, Fred, 8332 Torresdale Ave., Philadelphia, Pa.
Esbenshade, Aaron M., New Holland, R. 2, Pa.
Eyster, Paul H., Hanover, R. 4, Pa.
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Feeser, Roy R., Hanover, R. 3, Pa.
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Fetterman, Lorenzo, Catawissa, R. 2, Pa.
Fetterolf, Raymond A., 240 Penn St., Bloomsburg, Pa.
Fickel, C. W., Gardners, R. 1, Pa.
Finney, W. Raymond, Ivyland, Pa.
Fiori, Pasquale, Bristol, Pa.
Fisher, Fred M., Wernersville, Pa.
Fisher, John U., Gordonville, R. 1, Pa.
Fister, H. Ray, Dalton, R. 1, Pa.
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Fleming, T. Herman, Andalusia, Pa.
Flora Orchard Co., Mrs. B. S. B. Flora, Wrightsville, Pa.
Floyd, Wm. F., Perkasie, R. 3, Pa.
Ford, James E., Hanover, R. 2, Pa.

Forry, Harry, Menges Mills, Pa.
Forry, John H., Spring Grove, R. 3, Pa.
Frankhouser, John M., Honey Brook, Pa.
Frankhouser, J. R., Goodville, Pa.
Frantz, Charles P., Seven Valleys, R. 2, Pa.
Free, Wm. A., 220 Elmwood Blvd., York, Pa.
Frey, Samuel A., Hanover, R. 2, Pa.
Friendly Poultry Farm, LeRoy Hinkle, Spring Grove, R. 2, Pa.
Froehlich, D., Jamison, Pa.
Fugh, Arthur J., 140 Kittsbbing Pike, Sharpsburg, Pa.
Fuhrman, Robert C., Hanover, R. 3, Pa.
Fulmer, Elmer E., 1818 Fulmer St., Bustleton, Philadelphia, Pa.
Funk, A. H., Millersville, Pa.
Funk, W. W., Starkey Farms Co., Morrisville, Pa.
Gable, Isaac T., Dallastown, R. 1, Pa.
Gaenzer, L. E., Fleetwood, R. 1, Pa.
Gallagher, Paul, Spring Grove, R. 3, Pa.
Gancarz, John, Morrisville, Pa.
Gancarz, J. S., Morrisville, R. 1, Pa.
Garber, B. Snavely, Willow Street, Pa.
Garber, Paul R., Elizabethtown, R. 2, Pa.
Garges, Howard, Chalfont, R. D., Pa.
Garges, Howard S., Hilltown, Pa.
Garrahan, F. H., 100 S. Thomas St., King-
ston, Pa.
Garretson, Donald, Aspers, Pa.
Garrett, Ralph, Spring Grove, R. 3, Pa.
Gehman Dairy Farms, Macungie, Pa.
Geiselman, Myron B., 307 Baer Avenue, Hanover, Pa.
Geisler, George L., 1106 Woodward Avenue, McKees Rocks, Pa.
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George, Harry, Churchville, Pa.
Gersch, August, Southampton, Pa.
Gessler, Paul, Bustleton, Pa.
Gessner, Norman A., Paxinos, R. 1, Box 269, Pa.
Getty, Frank W., Catawissa, R. 2, Pa.
Getz, Rohrer, Mt. Joy, R. 1, Pa.
Gibble, Graybill G., Manheim, R. 1, Pa.
Gibble, J. H., Myerstown, R. 2, Pa.
Gilbert, A. F., Millersburg, Pa.
Gillan, C. Frank, St. Thomas, Pa.
Given, Luther J., Honey Brook, R. 1, Pa.
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Glass, John, Thomasville, R. 1, Pa.
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Bloomsburg, Pa.
Gobrecht, William D., Hanover, R. 2, Pa.
Godshall, Oliver C., Barnesville, Box 22, Pa.
Goll, Fred M., Academy and East Comly
Roads, Torresdale, Pa.
Good, Elmer V., Lititz, R. 1, Pa.
Good Co., James, Susquehanna Ave. and
Martha St., Philadelphia, Pa.
Goodfellow, Guy, Hanover, Pa.
Grabowski, Julius J., Sellersville, R. 1, Pa.
Graham, Harold, Elkins Park, Pa.
Grass, Leidy R., Perkasie, R. 3, Pa.
Grasse, J. M., Blooming Glen, Pa.
Gray, Ray M., Hanover, R. 3, Pa.
Graybill, F. C., Richfield, Pa.
Graybill, J. Homer, Manheim, R. 1, Pa.
Graybill, J. M., Mohnton, R. 2, Pa.
Greenbaum, Raymond, Allentown State
Hospital, Allentown, Pa.
Greene, Howard, 1236 No. Ninth St., Philadelphia, Pa.
Greiner, H. S., Manheim, R. 3, Pa.
Greissinger, E. F., 241 E. Ross St., Lan-
caster, Pa.
Greist, Joel R., York Springs, R. 1, Pa.

Greist, Peter, York Springs, R. 1, Pa.
Groft, Wm. J., Hanover, R. 4, Pa.
Groscoft, Harry, Gettysburg, R. 5, Pa.
Gross, Maurice, Narvon, R. 2, Pa.
Grote, A. E., Brodbecks, R. 1, Pa.
Grove, W. E., York Springs, Pa.
Grumbine, Lee J., Myerstown, R. 2, Pa.
Gruver, John, East Berlin, R. 3, Pa.
Guzibowski, Walter, Morrisville, R. 2, Pa.
Haar, Geo. F., Spring Grove, R. 2, Pa.
Haar, Harvey S., Menges Mills, Pa.
Haase, Alfred H., Narrowsburg, N. Y.
Hafer, George H., Yellow House, Pa.
Hafer & Son, Roy, Fayetteville, R. 1, Pa.
Haines, Henry, Norristown, R. 1, Pa.
Haist, Matthew M., Byberry Road, Torres-
dale, Philadelphia, Pa.
Haldeman, B., Harrison, Danboro, Pa.
Haller, Erhard, Sheridan, R. 1, Pa.
Hallowell, C. K., 303 Drexel Bldg., Phila-
delphia, Pa.
Hankey, K. L., York Springs, R. 2, Pa.
Hankey, Mervin S., Littlestown, Pa.
Hankinson, Kenneth, Pennington, N. J.
Harbold, Ervin, York Springs, R. 1, Pa.
Harbolt, William, York Springs, Pa.
Harlacher, D. B., Jr., York Springs, Pa.
Harnish, Clarence H., Lancaster, R. 4, Pa.
Harris, W. T., 4644 Richmond St., Phila-
delphia, Pa.
Harrison, Hartley, Westtown, Pa.
Hartman, Glenn W., Biglerville, R. 1, Pa.
Hartz, Ira, Elverson, R. 2, Pa.
Harvey, H. R., Harvey Hills Orchards, Fox-
burg, Pa.
Hassell, Chas. R., Bart, Pa.
Haug, Mrs. Frank M., Williamsport, R. 1, Pa.
Haug, Jas. H., 1017 Sheridan St., Williams-
port, Pa.
Haverstick, Paul E., 1254 Lititz Pike, Lan-
caster, Pa.
Hawkins, Charles T., Verona, R. 1, Pa.
Hawkins, W. Leroy, Southampton, Pa.
Heagy, A. B., Manheim, R. 1, Pa.
Heebner, Curtis A., Norristown, R. 2, Pa.
Heffner, Norman K., Pine Grove, R. 2, Pa.
Heiner, Claude E., Spring Grove, R. 3, Pa.
Heiner, Ellsworth, Spring Grove, R. 3, Pa.
Heiner, Theodore, Spring Grove, R. 3, Pa.
Heins, Henry, Narrowsburg, R. 1, N. Y.
Heisey, Henry W., Washington Boro, Pa.
Heisey, John, Millersville, Pa.
Heisey, Laban W., Lancaster, R. 1, Pa.
Heisey, Nathan P., Myerstown, R. 2, Pa.
Heisler, Arthur S., Tamaqua, R. 1, Pa.
Henderson, L., Stoneboro, R. 2, Pa.
Heppe, Raymond, Davisville, Pa.
Herold, Ray, Wilkes-Barre, Box 164, R. 1, Pa.
Herr, Christian E., Paradise, R. 1, Pa.
Herr, Clarence B., Lancaster R. 4, Pa.
Herr, David S., Lancaster, R. 6, Pa.
Herr, Edgar S., Manheim, R. 3, Pa.
Herr, Enos H., Mifflintown, R. 5, Pa.
Herr, Frank M., Lancaster, R. 6, Pa.
Herr, Paul H., Holtwood, R. 2, Pa.
Hersh, Henry, Spring Grove, R. 2, Pa.
Hershey, A. Frank, Lititz, R. 1, Pa.
Hershey, D. P., Lititz, R. 1, Pa.
Hershey, Elmer S., Lititz, R. 1, Pa.
Hershey, J. Harry, Lititz, Pa.
Hershey, Milton L., Manheim, R. 3, Pa.
Hershey, Noah, Parkesburg, Pa.
Hertzler, D. R., Richland, R. 1, Pa.
Hertzler, Ralph, Elverson, R. 2, Pa.
Hess, Charles H., Pequea, R. 1, Pa.
Hess, F. M., Waynesboro, Pa.
Hess, Maris W., Conestoga, R. 1, Pa.

Keiser, J. R., Chef Boy-Ar-Dee Quality Foods Inc., Milton, Pa.
 Kellett, Harold J., Morrisville, R. 1, Pa.
 Kendra, Adam, Sellersville, R. 1, Pa.
 Kennel, A. M., Honey Brook Manor Farm, Honey Brook, Pa.
 Kerr, George A., Virginville, P. O. Box 37, Pa.
 Kessler, Charles, Spring Grove, R. 2, Pa.
 Keystone Cooperative Grape Association, North East, Pa.
 Kincaid, S. C., Blawnox, Pa.
 King, Daniel B., Gap, R. 1, Pa.
 King, Emery D., Malvern, R. 2, Pa.
 King, Karl C., King Farms Company, Morrisville, Pa.
 King, Myron A., Morgantown, Pa.
 Kirk, Amos K., Newtown, Pa.
 Kirk, Leslie F., Newtown, Pa.
 Kitten, Harry B., Ivyland, Pa.
 Klaus, Elmer E., Willow Street, R. 1, Pa.
 Klenk, Howard H., Southampton, Pa.
 Kliesch, Emil F., Jr., Morrisville, Pa.
 Kliesh, E. F., Morrisville, R. 2, Pa.
 Klimkowski, Joseph, Holmesburg, Pa.
 Kline, E. Samuel, Lititz, R. 1, Pa.
 Kline, Harry G., Lititz, R. 2, Pa.
 Kline, Howard F., Lititz, R. 2, Pa.
 Kline, H. J., Kintnersville, R. 1, Pa.
 Kline, Harry L., Lititz, R. 2, Pa.
 Kline, Morris H., Strausstown, Pa.
 Klinefelter, R. E., Gettysburg, R. 5, Pa.
 Klippe, J. W., Clarks Summit, R. 2, Pa.
 Knauer, Harry G., Sheridan, R. 1, Pa.
 Kobel, Nick, Comly Road, Torresdale, Pa.
 Kohr, Archie, York, R. 4, Pa.
 Koller Fertilizer Co., Coatesville, Pa.
 Koller, Wm. H., Koller Fertilizer Co., York, Pa.
 Kolodziejski, Ludwig, Perkasie, R. 3, Pa.
 Kraft, Ira, Spring Grove, R. 3, Pa.
 Kratz, Lawrence W., Chalfont, R. D., Pa.
 Kreider, Amos H., Lititz, R. 3, Pa.
 Kreider, Bard E., Lititz, R. 4, Pa.
 Kreidler, E. H., Spring Grove, R. 2, Pa.
 Krenzer, Charles, Hanover, R. 3, Pa.
 Kreps, J. A., Pottstown, R. 1, Pa.
 Krout, Edward C., Spring Grove, R. 3, Pa.
 Krug, E. H., Hanover, R. 2, Pa.
 Kuhlers Feed & Farm Supplies, Montoursville, Pa.
 Kulp, C. Rudolph, Pottstown, P. O. Box 122, R. 1, Pa.
 Kurtz, Earl L., Sheridan, R. 1, Pa.
 Ladd, M. S., Waverly, Pa.
 Lancaster Co. National Bank c/o A. G. Bucher, Lancaster, Pa.
 Landis, Christian L & Lester M. Hurst, Lancaster, R. 4, Pa.
 Landis, Harry, Brodbecks, R. 1, Pa.
 Landis, Miles B., Lancaster, R. 5, Pa.
 Landreth Seed Company, D., Bristol, Pa.
 Landsidel, C. W., Dalton, R. 2, Pa.
 Lapp, Christian K., Parkesburg, R. 2, Pa.
 Lapp, Daniel S., Strasburg, R. 1, Pa.
 Lapp, Grant, New Britain, Pa.
 Lapp, John F., Ronks, R. 1, Pa.
 Lapp, John S., Ronks, R. 1, Pa.
 Lapp, Norman, New Britain, Pa.
 Lau, Norman, Spring Grove, R. 1, Pa.
 Lauer, Kurv W., Dept. of Agriculture, Harrisburg, Pa.
 Lausch, John S., Neffsville, Pa.
 Leaman, Ellis D., Manheim, R. 2, Pa.
 Leaman, M. Rohrer, Lancaster, Box 433, Pa.
 Leese, H. C., Brodbecks, R. 1, Pa.
 Lehigh Portland Cement Co., M. P. Tait, Farm Supt., Stetlersville, Pa.
 Lehigh, Samuel, Hanover, R. 3, Pa.

Lehman, Paul, York Springs, Pa.
 Lehman, Stewart, Dillsburg, R. 1, Pa.
 Leiss, John M., Robesonia, Pa.
 Lengel, Paul H., Pine Grove, Pa.
 Lenox, Daniel L., Washington Boro, R. 1, Pa.
 Lentz, Erney, York, R. 6, Pa.
 Leonard, Leroy H. & Marie A. Leonard, Bristol, R. 1, Pa.
 Lerew, P. A., York Springs, Pa.
 Lerew, Paul B., York Springs, R. 1, Pa.
 Leschey & Myers, Commerce Street, Hanover, Pa.
 Lewis, Edward, 1200 Almond St., Williamsport, Pa.
 Lewis, M. T., State College, Pa.
 Lewis, William H., Jr., Perkasie, R. 3, Pa.
 Light, David L., Lebanon, R. 3, Pa.
 Lightner, Roy E., Sheridan, R. 1, Pa.
 Lightner, William, Spring Grove, R. 3, Pa.
 Lindner, Frank J., Ringtown, Pa.
 Liszewski, Henry, Rogers Road, R. 2, Bristol, Pa.
 Little, J. Harold, Hanover, R. 3, Pa.
 Little, John R., Hanover, R. 3, Pa.
 Livingston, Donald, Thomasville, R. 1, Pa.
 Lloyd, Ernest S., Pottstown, R. 2, Pa.
 Lojeski, Julius, Bristol, R. 2, Pa.
 Lojeski, Stanley T., Doylestown, R. 2, Pa.
 Loller, Roy, Johnsburg, Pa.
 Long, H. M., 622 Oak St., Irwin, Pa.
 Long, J. C., 340 East Liberty St., Lancaster, Pa.
 Long, Melvin L., Lititz, R. 3, Pa.
 Loop, H. S., North East, R. 2, Pa.
 Lott, R. C., Bear Mountain Orchards, Aspers, R. 1, Pa.
 Love, James, Huntingdon Valley, Pa.
 Lovett, William, Bristol, R. 1, Pa.
 Lucas, Peter, Bristol, R. 1, Pa.
 Luckenbaugh, Charles, Hanover, R. 3, Pa.
 Luckenbaugh, Harry, Hanover, R. 2, Pa.
 Luckenbaugh, John, Spring Grove, R. 2, Pa.
 Luckenbaugh, Lester, Hanover, R. 2, Pa.
 Luckenbill, Charles, Schuylkill Haven, Pa.
 Lukomski, Joseph, Sellersville, R. 1, Pa.
 McCoury, D. E., Spring Grove, R. 3, Pa.
 McFarland, J. Horace, Mount Pleasant Press, Harrisburg, Pa.
 McPherson, H. C., McPherson Bros., Bridgeton, Pa.
 McVaugh, Wm., Jr., New Garden, Pa.
 Mack, W. B., State College, Pa.
 Madison, F. M., Spring Grove, R. 1, Pa.
 Malehorn, John, Salunga, Pa.
 Malin, George, Sr., Malvern, R. 2, Pa.
 Manning, Frank E., State College, Pa.
 Markey, R. E., York, R. 2, Pa.
 Markle, Samuel, Spring Grove, R. 2, Pa.
 Martin, Aaron A., Lititz, R. 3, Pa.
 Martin, Clayton M., East Earl, R. 1, Pa.
 Martin, Elwood, Spring Grove, R. 3, Pa.
 Martin, Guy W., East Earl, R. 1, Pa.
 Martin, Howard, Hanover, R. 1, Pa.
 Martin, Lester C., East Earl, R. 1, Pa.
 Martin, J. Percy, Holtwood, R. 1, Pa.
 Martin, Paul, Hanover, R. 2, Pa.
 Martin, W. H., Menges Mills, Pa.
 Martin, W. S., Thomasville, R. 1, Pa.
 Martz, Homer H., KDKA, Pittsburgh, Pa.
 Marx Bros., Ambler, Pa.
 Masemer, Maurice H., Hanover, R. 2, Pa.
 Masemer, Mervin, York Springs, R. 1, Pa.
 Masenheimer, Edward F., Spring Grove, R. 3, Pa.
 Mason, T. K., Street Road, Southampton, Pa.
 Masonic Homes, Elizabethtown, Pa.
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Mastin, E. O., Mastin Farms, Quakerstown, R. 2, Pa.
 Melhorn, John, Mt. Joy, Pa.
 Melsky, John, Sr., Newtown, Pa.
 Mende, A. H. & Son, Bristol, R. 2, Pa.
 Menges, William, Spring Grove, R. 3, Pa.
 Messersmith, M. G., Seven Valleys, R. 1, Pa.
 Metzler, Clarence R., East Petersburg, Pa.
 Meyer, C. L., 3668 Celina Place, Corliss Station, Pittsburgh, Pa.
 Michell Company, Henry F., 516-518 Market St., Philadelphia, Pa.
 Miguelez, Andres, South Langhorne, Pa.
 Miley, Geo. S., Ephrata, R. 3, Pa.
 Miller, Arthur H., Manheim, R. 1, Pa.
 Miller, Charles, 1208 Broadway, Hanover, Pa.
 Miller, Charles W., 1228 Sherman St., Williamsport, Pa.
 Miller, Clair, Spring Grove, R. 2, Pa.
 Miller, Curvin, Brodbecks, R. 1, Pa.
 Miller, Emory S., Spring Grove, R. 1, Pa.
 Miller, Dr. Fred D., 1122 Twelfth Ave., Altoona, Pa.
 Miller, Graybill, Manheim, R. 1, Pa.
 Miller, John L., Thomasville, R. 1, Pa.
 Miller, Marvin, Clarks Summit, R. 1, Pa.
 Miller, Max, Hublersburg, Pa.
 Miller, Paul, Spring Grove, R. 2, Pa.
 Miller, Mrs. Sadie, Hanover, R. 2, Pa.
 Miller, S. R., Spring Grove, R. 2, Pa.
 Milnor, William, Bristol, Pa.
 Mitesser, John W., Jr., Anderson Rd., Millvale, Pa.
 Mitman, Herbert A., 1540 Northway Rd., Williamsport, Pa.
 Mobus, Mabel C., 303 W. Main St., Everett, Pa.
 Molison, Glenn, Hanover, R. 3, Pa.
 Molitor, Joseph C., Rossotti Lithographing Co., North Bergen, N. J.
 Moll, Frank, Chalfont, Pa.
 Morinelli, Fred, Jr., 204 So. Second St., Philadelphia, Pa.
 Morris, L. V., Bristol, Pa.
 Mosebrook, James, Spring Grove, R. 2, Pa.
 Moses, Robert F., Royersford, R. 1, Pa.
 Mowery, Landis, Willow Street, R. 1, Pa.
 Mummert, John, Spring Grove, R. 3, Pa.
 Mummert, Mary, Spring Grove, R. 3, Pa.
 Mummert, M. C., Spring Grove, R. 3, Pa.
 Mummert, Nelson, Hanover, R. 3, Pa.
 Mummert, Norman, Seven Valleys, R. 1, Pa.
 Mummert, Roy, Spring Grove, R. 2, Pa.
 Mummert, Sterling, York, R. 1, Pa.
 Murren, Francis, Hanover, R. 4, Pa.
 Musselman Company, The C. H., Bigerville, Pa.
 Musser, Elias, Mount Joy, R. 1, Pa.
 Musser, W. E., New Bethlehem, R. 3, Pa.
 Myer, Clayton P., Manheim, R. 2, Pa.
 Myer, Reuben, Lititz, R. 5, Pa.
 Myers, Albert, Spring Grove, R. 1, Pa.
 Myers, Allen, Spring Grove, R. 1, Pa.
 Myers, Allen M., Hanover, R. 3, Pa.
 Myers, Amos, Spring Grove, R. 1, Pa.
 Myers, C. E., State College, Pa.
 Myers, C. P., Gettysburg, R. 5, Pa.
 Myers, Elmer, Bristol, R. 2, Pa.
 Myers, Emory H., Brodbecks, R. 1, Pa.
 Myers, Ernest A., Spring Grove, R. 1, Pa.
 Myers, Ernest R., Gettysburg, R. 5, Pa.
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PENNSYLVANIA VEGETABLE GROWERS' NEWS

PUBLISHED QUARTERLY—MARCH, MAY, JULY AND DECEMBER

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* First named member is Chairman of the Committee.
President and Secretary are ex-officio members of all committees.

A Message From Our President

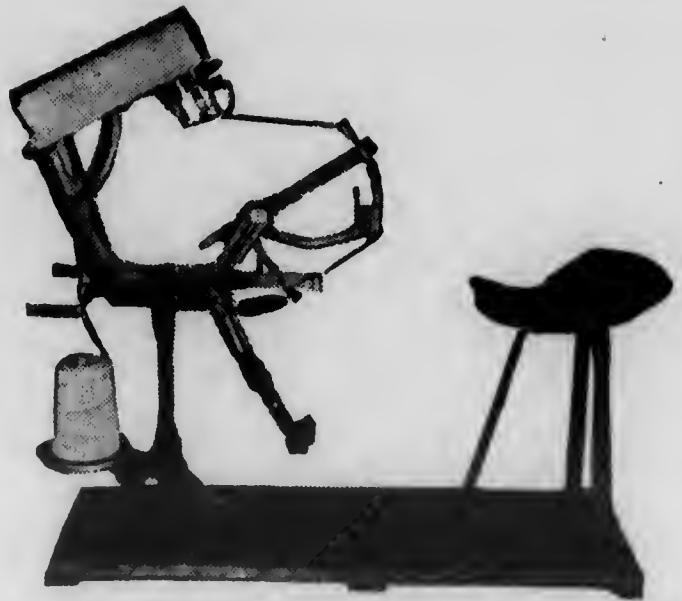
At this writing the Pennsylvania Vegetable Growers seem to be facing the heaviest burden of this war period, complicated by unseasonable weather and heavy rains. These unfavorable conditions further complicated by scarcity of labor, machinery and materials make the growers' problems more numerous, more serious, and more discouraging. Some of these conditions must be expected in such trying times, but the fact that large acreages of vegetable crops are being plowed down because there is not the labor available to weed them makes me very skeptical as to reaching our goals for increased production. As President of your Association, I should be writing in a more encouraging language, but the facts are such that the powers that be should have them repeatedly brought to their attention, and that part of the responsibility should be laid in their laps. The last week in May and the first week in June nearly a quarter of a million bushels of spinach was lost in our area due to weather conditions bringing several plantings in at one time and the inability of the market to absorb such surpluses. Through the co-operation of Mr. Porter Taylor, W.F.A., and the Philadelphia Vegetable Growers' Co-operative Association, we were able to move the next crop for canning purposes, which helped to stimulate the market and to bring a return to the grower that enabled him to survive. I bring this fact to your attention for two reasons: first, to show what can be done through co-operation, and second, the importance of it to the smaller grower. We must be organized together, helping with one another's problems and standing united for the best interest of agriculture and a final victory of all men and all people.—Ray W. Wenker

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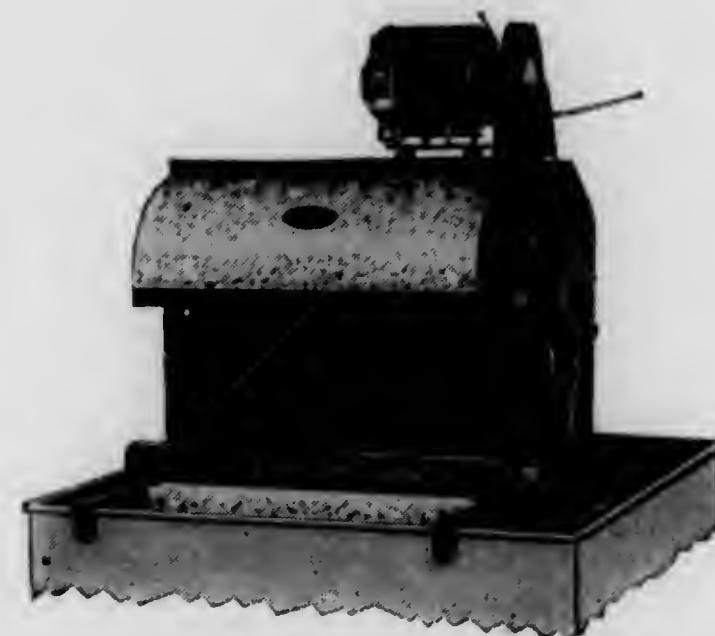
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Vegetables For Next Winter's Meals

LYDIA TARRANT*

Garden-fresh vegetables can do double duty this year. Besides appearing on the family dinner table, the surplus vegetables can be preserved to help keep the family well fed next winter. Every jar or package of garden-fresh produce that is put up this summer will ease the load on transportation and commercial food supplies.

Preserving food by a system helps in meal planning and makes for a greater variety in the food served. This year homemakers are urged to can at least 60 quarts of vegetables for each member in the family. Not only will this provide the food that is needed but it also will help to stretch the ration points. It is suggested that these 60 quarts of vegetables include the following: 25 quarts of tomatoes, 10 quarts of leafy greens, 15 quarts of other green and yellow vegetables, and 10 quarts of other vegetables.

This plan for canning allows for one serving of a canned vegetable a day exclusive of tomatoes. The other daily servings of vegetables which are recommended for a well-rounded diet may be quick-frozen, salted, dried, or pit-stored ones.

Food preservation is a simple matter for most anyone who has or can get the necessary equipment and supplies. Canning, of course, is the most popular method of preserving food, but homemakers who have access to a frozen food locker are going to quick-freeze some of their vegetables this summer. Drying and salting are being revived as wartime methods of preserving food principally to add

* Miss Tarrant is Extension Nutrition Specialist at The Pennsylvania State College.

PHONE, CORNWELLS 0421

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variety to meals and to conserve the supply of glass jars and rubbers that are musts for canning. Root vegetables, cabbage, celery, kale, pumpkins and squash are especially well-suited to storing and go a long way toward providing the family with good food.

One must for all vegetables that are preserved is that they be fresh and of good quality. Preserving does not improve the quality of a poor product. It is important for canning, freezing, drying, or salting vegetables that there be as little time as possible lapse between picking and processing. "One hour from garden to can" is a good rule to follow regardless of whether the vegetable is to be canned, quick-frozen, salted, or dried. Speed is essential in order to reduce the danger of spoilage to a minimum.

Garden-fresh vegetables when at just the right stage of maturity for table use are ready for preserving. Only young, tender, and fresh products should find their way to the glass jar, to the freezer-locker, to the drying trays, or to the stone crock.

If detailed information is desired on any of the methods of food preservation, it may be obtained from the home economics extension worker in the County Agricultural Extension Association office.

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Farm Labor Program

As reported in the May issue the Emergency Farm Labor Program has been assigned by action of Congress to the Agricultural Extension Service. J. M. Fry, who is Director of the Agricultural Extension Service at The Pennsylvania State College, is in direct charge. J. E. McCord is State Supervisor of the program. Working with them and in charge in the Counties are the County Agents and Emergency Farm Labor Assistants.

County Emergency Farm Labor Committees, composed of farmers, urban representatives and school authorities, act in an advisory capacity in the conduct of the program.

In practically all counties information has been secured from farmers as to their labor needs and plans for recruiting labor developed. The pool of skilled labor has been drained partly by the armed forces and partly by higher wages paid by industry. The only source left consists largely of untrained men and women and boys and girls. Many will volunteer their help. It will be up to the individual farm to use it to the best advantage. Patience, sympathy, understanding will be necessary to get along with their inexperience, their soft muscles, and in some instances their short results. This is a situation which no one likes and will mean more time must be taken in training and supervising such workers. But it is a national emergency and the best use must be made of what we have.

A vegetable grower in one county made the following suggestion for use of school boys and girls. He said: "They go to work around seven o'clock to work until 10. Then we have a rest period and I set out a few cases of pop or some soft drink with a few cakes or cookies. After that we work until lunch time. After lunch we work until about three o'clock and then quit for the day. I find that in handling them this way that more work is done, and what's more they are not tired out and will come back day after day."

Up to the last of June, with the program just getting under way, over 3,000 workers—men, women and children—had been placed. Camps for non-resident workers are being planned and put into operation in some critical areas. Workers brought in from outside the county will live here, going back and forth to the farm in the vicinity each day.

The whole program is being decentralized as much as possible, leaving the responsibility for the determination of needs and how to meet them up to the Emergency Farm Labor Committee who advise the County Agents and Emergency Farm Labor Assistants.

You can lose a whole year's work in 5 minutes

YOUR CROPS, this year, are more important to you than ever before. Despite shortages of manpower and machinery, you are extending every effort to produce bigger yields and better quality to help win the War. Your 1943 harvest represents more than a year's income. It will be a major contribution to Victory.

Yet, you can lose all of the work, worry and money you put into your crops in a single afternoon . . . if you get a bad hail storm. Five minutes of heavy hail can destroy or seriously damage your chance of a harvest.

Be protected! Buy Hail Insurance! The moderate cost of Hail Insurance pays big dividends when hail strikes. You need this protection as soon as your crop has made a stand or your fruit is set. It pays to insure early to get full-time coverage at no extra cost.

Your Hail Insurance on any crop should at least equal your cost of producing that crop. You can even protect part of your expected profits by purchasing a Policy that provides maximum coverage. Select the Policy that fits your needs and ACT TODAY!

See your local agent of: The Aetna Fire Group; The North America Companies; or, The Springfield Fire Group. Or, write for your free copy of the booklet: *Protecting Your Cost of Production*. Address a penny postcard to: G. L. Booker, Supt., Hail Department, 90 John Street, New York, N. Y.

U. S. Employment Service Acknowledges Transfer

It is regretted that some misunderstanding resulted from an article contributed in the previous issue by Truman B. Thompson of the U. S. Employment Service. The May issue went to press as the Farm Labor Program was being transferred to the Agricultural Extension Service and the Secretary hoped to avoid confusion by inserting both articles, neither of which he felt he alone had authority to cancel. The following letter was received from H. Raymond Mason, Director, U. S. Employment Service for Pennsylvania, by Truman B. Thompson:

"I certainly appreciate your letter of May 26, attaching an article which appears on Page No. 7 of the May issue of the 'Pennsylvania Vegetable Growers' News.'

"On May 26, 1943, the date of your letter, this office issued Director's Memorandum No. 349, copy of which I am attaching, which transferred the responsibility for assisting the farmers of Pennsylvania to secure an adequate labor supply from the USES to the Agricultural Extension Service, and cancelled the Farm Placement Program within the USES. This transfer of responsibility is in accordance with War Manpower Commission Directive No. 17 of January, 1943, and H. J. Resolution No. 96, approved April 29, 1943."

For the convenience of vegetable growers and others who may need this the name of the Labor Assistant and location of their offices is given below.

COUNTY	LOCATION OF OFFICE	PHONE	FARM LABOR ASSISTANT
Adams	111 Baltimore St., Gettysburg	290	Herbert Miller
Allegheny	Court House, Pittsburgh	Atl. 8297	E. C. Carter
Armstrong	208 N. Jefferson St., Kittanning	82	J. A. Mechling
Beaver	Trust Bldg., Beaver	772	O. Walker Shannon
Bedford	S. Juliana St., Bedford	289-Y	Coy Mearkle
Berks	Court House, Reading	6121-Ext. 213	Philip W. Burtner
Blair	Court House, Hollidaysburg	1349 Holli.	H. R. Gwin
Bradford	Court House, Towanda	87	Ruth Fish
Bucks	W. State, Doylestown	Doy. 5420	Amos Satterwaite
Butler	Community Bldg., Butler	But. 5270	Ralph L. Roenigk
Cambria	Court House, Ebensburg		J. A. Farabaugh

COUNTY	LOCATION OF OFFICE	PHONE	FARM LABOR ASSISTANT	COUNTY	LOCATION OF OFFICE	PHONE	FARM LABOR ASSISTANT
Cameron	Court House, Emporium	348		Luzerne	Rear 84 Scott St., Wilkes-Barre	3-4315	Wilson Cease
Carbon	Court House, Mauch Chunk	467		Lycoming	Housel Bldg., Williamsport		Clyde A. Taylor
Centre	W. High St., Bellefonte	2780	Ralph H. Dale	McKean	W. Main St., Smethport	12-J	Henry J. Rice
Chester	Farmers & Mechanics Bldg., West Chester		R. L. Light	Mercer	N. Pitt St., P. O. Box 267, Mercer	295	George Seiple
Clarion	N. 5th St., Clarion	529	Walter R. Nale	Mifflin	3 W. Market St., Lewistown	3098	Henry M. Taylor
Clearfield	Bigler	983-R-23	Kenneth H. Shirey	Monroe	Federal Bldg., Stroudsburg	504	
Clinton	124 E. Main St., Lock Haven	2407	Harry F. Weber	Montgomery	Penn St., Norristown	5000	George D. Horrocks
Columbia	Court House, Bloomsburg	1291	Larue C. Derr	Montour	Court House, Danville	228	Fred Showalter
Crawford	898 Park Ave., Meadville	1669	Mrs. Mildred Patterson	Northampton	Court House, Easton		
Cumberland	Sentinel Bldg., Carlisle	970	James W. Craighead	Northumberland	Cor. Market & 2nd Sts., Sunbury	12R1	Francis H. Hutchinson
Dauphin	Municipal Bldg., Harrisburg	6-1407	Paul B. Kaylor	Perry	Court House, New Bloomfield	12R3	Edward Reapsome, Jr.
Delaware	Court House, Media		Elton Richards	Philadelphia	9734 Bustleton Ave., Bustleton	8212	Harry P. North, Jr.
Elk	Court House, Ridgway	21142	T. Sherman Stanford	Pike	Court House, Milford		
Erie	8th & Peach Sts., Erie	24-277	John J. Yost	Potter	Court House, Coudersport		
Fayette	100 W. Fayette St., Uniontown	4879	Guy E. Rider	Schuylkill	Court House, Pottsville		
Forest	Court House, Tionesta	131		Snyder	Court House, Middleburg	57	E. E. Ferster
Franklin	150 N. Second St., Chambersburg		H. Lester Oyler	Somerset	Court House, Somerset		C. F. Saylor
Fulton	Court House, McConnellsburg			Sullivan	Railroad & Main Sts., Dushore	9R0	
Greene	N. Washington St., Waynesburg	889	Glenn Arnold	Susquehanna	25 Public Ave., Montrose	267	F. J. Scott
Huntingdon	401 Washington St., Huntingdon	788	F. Donald Mark	Tioga	109 Main St., Wellsboro	269	W. W. Zurfluh
Indiana	Savings & Trust Bldg., Indiana	1690	Clarence Shields	Union	424½ Market St., Lewisburg	5-13591	Fred Showalter
Jefferson	Boro Bldg., Brookville	311	Everett E. Reitz	Venango	Court House, Franklin		
Juniata	Court House, Mifflintown	80-X	H. M. Taylor	Warren	220 Liberty St., Warren	3090	C. C. Winans
Lackawanna	725 Connell Bldg., Scranton	2-6314	J. N. Carpenter	Washington	Court Arcade Bldg., Washington		Glenn A. Arnold
Lancaster	Y.M.C.A. Bldg., Lancaster	8211	R. S. Hovis	Wayne	Court House		R. D. Wilson
Lawrence	21 S. Well St., New Castle		O. W. Shannon	Westmoreland	213 S. Penna. Ave., Greensburg		Harry F. Kelly
Lebanon	823 Chestnut St., Lebanon	3285	Paul Horst	Wyoming	Court House, Tunkhannock		J. H. Geist
Lehigh	451 Hamilton Street	2-5881	F. S. Sittler	York	316 S. George St., York	7657	Howard R. Sauder

Crop, Market and Labor Conditions

A. C. THOMPSON, Morrisville, Eastern Pennsylvania

CROP CONDITIONS:

At the present time (July 4) we, at Morrisville, Pa., are in the midst of a dry spell that is checking crop growth. Up to recent date, however, growing conditions have been excellent with rainfall above normal, and most crops have overcome a large part of the handicap of a very late spring.

This year we did not cut asparagus until May 2nd, compared with April 23rd in 1942. First rhubarb was pulled April 23rd this year as against April 16th last year. First beets were pulled on June 8th compared with May 31st and first beans were picked on June 22nd compared with June 15th of 1942.

Due to the late start the volume of spring spinach cut this season was about 15 per cent less than last year. The weather in late May and early June was so warm that a rather large acreage of spinach went to seed before it could be cut, and was plowed down. The asparagus crop was quite heavy and quality good, but due to the short season the total volume was about 5 per cent less than last year. During May the market for rhubarb was poor, but during the latter part of June, rhubarb was in good demand, which seemed rather unusual.

The current crop of snap beans is showing very light yields due to the dry weather and extreme heat the latter part of June, which resulted in a light set of beans. On June 17th we had a heavy rainfall of two inches, but only about a quarter of an inch since that time. During May, the rainfall was above normal and many farmers in this area were so busy on marketing that some of their crops, like beets and carrots, became so weedy that they were forced to plow under part of their acreage and replant. However, on the whole, there appears to be an increased acreage of vegetables planted in this section, especially on such crops as tomatoes, potatoes, snap beans, carrots and beets. Up to date damage from insects and disease has been rather light, and the general appearance of crops is good, except that growers have had an unusual infestation of weeds. A number of beet and carrot fields have been hand-weeded twice and are still weedy.

MARKETS:

We have experienced no serious market gluts as yet. However, the bean market was off for a couple of days late in June, but it quickly recovered due to diminishing supply resulting from the dry weather.

LABOR SUPPLY:

In regard to labor, we have been short at times, but have not been seriously handicapped in getting crops harvested for market, but some of our jobs of weeding and thinning on crops like beets, carrots and parsnips just had to wait until we could get to them, with the result that the jobs cost more when they finally got done, because the weed problem became so much worse by waiting.

This year we have established on our farm a camp for about 300 workers from Jamaica to reinforce our regular labor supply. The Jamaicans were obtained through the Farm Security Administration, and they have proven to be satisfactory workers. Many of these men worked on farms in Jamaica, growing crops like bananas, oranges, yams, coffee, rice and sugar cane. Crops like asparagus, rhubarb and spinach are quite strange to them, but they are fast becoming familiar with working on our type of crops. In addition, we have been employing over one hundred school children on our regular force in addition to about 300 southern migrant workers, and about the same number of regular adult workers from nearby sources. During the bean picking season, which is heaviest during July and August, an additional force of about 500 or more pickers is required.

Other growers in this area are utilizing whatever sources of labor they can obtain, and most of them think the Agricultural Extension Service is doing an excellent job in supplying emergency agricultural workers to meet the present labor shortage on farms.

Half of our calendar year is past, but the larger part of our crop-growing season is still ahead of us. In general, record plantings of our most important crops have been made, and in spite of a late season there is still time to produce large crops to meet our country's heavy demand for food in 1943.

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Moreton Farms

Rochester, N. Y.

It Helps A Lot To Give and To Expect a Great Deal

GILBERT S. WATTS, Bellwood, Central Pennsylvania

It is both our opportunity and our obligation to maintain or, if possible, to increase moderately our normal schedule of production; and I believe we have a reasonable chance to succeed at it. Excessive rains in April depressed our May-June level of output. Our summer and fall production promises to be about normal with an increase in potatoes and the addition of 20 acres of cannery tomatoes.

We have had plenty of labor since late in April. Our wage rates are very slightly more than double what they were in 1941 and at that we did a lot of hunting up of young people to recruit a full force. Because our operations are so highly seasonal, with only two or three employees in the winter and 50 to 200 in the summer, it is no new experience to manage many inexperienced hands.

First there is a key group of three experienced men who can drive tractors and trucks, operate a planter or sprayer, and serve as foremen when many extras are on the job. Then we have 8 or 10 selected boys, 16 to 18 years of age, most of whom have picked berries, beans and similar crops and worked here for several years. These fellows are the pick of the crop of the younger lads of a few years ago and have spent many days as helpers (mostly just to learn) around all sorts of machines. Now they make expert operators with very little additional training. We pay them almost as much as the regular men and these fellows are indeed the means of keeping the equipment operating full time.

As additional supervisors, foremen and salespeople we have school teachers, ones who have demonstrated their managerial ability and control in the class rooms. One is the local football coach. The boys like to be on the good side of him, thus the bossing becomes easy. Another is a woman home economics teacher, who generally manages a group of girls. The others sell, keep time, check in baskets or supervise field groups.

Nearly all the picking of crops is done by youngsters working on a piece-work basis. We have practically no trouble with them and, honestly, must generally blame ourselves when we do. *First, we must show them what they are to do, being sure they really understand. Second, we must have efficient, active supervisors, who will*

see to it that the crowd doesn't get the idea they can slight the job. The most contented gang is always the one that is doing the job in an efficient manner. When supervision is loose, you soon have some workers trying to get away with slovenly tricks and the whole gang becomes demoralized.

Third, we must not expect people to do more than they can. Some of the time work is trying on the back, nerves or stamina. The foreman must be able to pick out those who are doing what they can and those who are laying down on the job. Generally, it pays to keep a gang on the move without permitting loafing in the field. Then, call them out for a rest at suitable intervals.

Fourth, do not imagine the average worker, especially a youngster, is going to worry himself or herself or lie awake nights if the beans are not all picked on a Friday and will be too big on Sunday or Monday. You and I did not worry about that when we were kids. We let Pop, or the boss, do the worrying. Now, it is up to us to have enough workers on the job and so manage in general that we don't often have to appeal to the pickers to stick by and help up out of trouble. Of course, if adverse weather has been the cause of your jam, O.K., but we must not imagine the working crew will accept the bad weather as an excuse for an inconvenient situation that really began with our own oversight before the weather set in.

It all could be summed up with good planning, understandable instruction, fair supervision, and, of course, reasonable compensation in some proportion to how hard the picking is and what the crop is bringing.

Lancaster Conditions and Prospects

JOHN C. LONG

From reports received from the growers that I have discussed this phase with, High School students with proper male teacher supervision have proved very satisfactory. The piece-work method of pay has not worked out too satisfactorily. This obtains particularly on beans and peas. On the first picking everything is fine, but on subsequent pickings they kick because they can't make as much. The hour basis of pay seems to work out more satisfactorily under all conditions.

Crops look good generally.

There is every indication of good market prices. You will find that the grower who practices insect and disease control, is the grower who will get top prices for higher quality, plus increase in yield.

Scranton Tomato and Cabbage Growers

HARRY W. HOPKINS

There has been a very heavy planting of vegetable crops, especially tomatoes, for "green wraps," some under rather unfavorable conditions, so that it seems as if the total yield could not be more than average, if that.

Growers seem to think that they will be able to get help to harvest the crops but it looks as if it would cost considerably more than previously. In the past they have gotten women, boys and girls from the nearby mining towns.

More machinery is being used than ever before, some loaning it to their neighbors to use.

I believe growers will have to watch their production costs.

West Chester-Media Area Gets Help

J. F. STYER

We anticipate good crops of tomatoes, beans, sweet corn, and have a bunch of Media high school boys, 7 to 8 hours daily, doing very well. Lost a part of our topsoil in cloudburst Sunday, June 27.

Asgrow Seeds

BRED FOR THOSE
WHO WANT THE
BEST

AWARDED

3 Gold Medals
8 Silver Medals
7 Bronze Medals

in the past 11 years of
All-America Trials



To be sure, sow Asgrow. A full line of up-to-date varieties, bred and grown with the experience of 86 years. Sold through local dealers.

ASSOCIATED SEED GROWERS, INC., MILFORD, CONN.

Western Pennsylvania Growers Carry On

LOUIS ORIENT, Bridgeville, Allegheny County

The tomato crop of Western Pennsylvania has got off to a good start despite early conditions that were not too favorable. Rains in the middle of May hampered soil fitting and early planting, but by the end of May the crop was planted. Cut worm damage was small, insuring a good stand (98 per cent). At the present time the tomatoes are well grown, cultivated twice, hoed once and are now being mulched with wheat straw at the rate of two and one-half tons per acre. The reason for mulching is to retain soil moisture, reduce weed growth and increase clean fruit at picking time.

The labor situation in Western Pennsylvania is slightly short due to mills and factories consuming the greater part. Now that school is out the labor situation is better and with local draft boards deferring key workers, the situation looks good until September.

As you know, the bulk of the tomato harvest is after September 1 and if some steps are not taken in which school children are released there will be a serious labor shortage at the most critical time. The local County Agents now have charge of labor placements on farms and if we co-operate with them I think the crop can be harvested and marketed.

The market situation at the present time looks good and I think there will be a good demand for farm products at favorable prices, and, in closing, I urge that every effort be used to produce the maximum food that is so badly needed in this national emergency.

Vegetable Growers Association of America conference, December 14 and 15, 1943, Hotel Sherman, Chicago, Ill. Suggestions for discussion topics are requested.

Robson's Hybrid Seed Corn costs a few cents more but what a difference at harvest time. Intelligent corn breeding by our trained men combined with careful growing on our own farms produces Robson's Quality Seed Corn.

Write today for 1943 illustrated catalogue.

**ROBSON SEED FARMS,
HALL, N. Y.**

Cabbage Growers Use Labor Saving Devices

R. B. STUTZMAN, Cramer, Indiana County

Up to the present time we have had no labor shortage in our community, as the high school boys have been very willing when needed. Another thing that has helped, we got all our machinery and equipment repaired during the early months of the year and wet weather, and were ready to go right ahead when the time came to get our ground ready and planting done. We also do most of our planting with machinery in our community.

As for my own 80 acres of crops that I have planted, it has all been done with a two-row planter, and I am therefore able to cultivate it all with a two-row tractor cultivator. A weeder, designed by the blacksmith and myself, is attached to the draw bar, which practically does away with hoeing. I have never known the crops to get off to a better start than they have done this year.

The late cabbage crop has been planted and is getting off to a good start, which was followed by some good rains when needed. The crop will consist of about 100 acres in our community.

Another item on the labor situation—I have a very good operator who lives on one of my farms the year round.

Asgrow

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Outstanding strains for the Critical Market Grower

A full line of fine vegetable seeds including—

HYBRID SWEET CORN
PEAS - BEANS
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ALLENTOWN, PA.

We've gone "All Out"

To Safeguard Your Profits

**TOMATO
SEED**

ALL LEADING VARIETIES

Penna. State Certified

Over 30 years Experience Breeding and Growing Better Tomato Seed

"The HOUSE OF GLICK"

Smoketown Pennsylvania

A Message To Canning Crop Bean Growers

WILLSON C. DICKSON, Hanover, York County

Are you trying your best to get the most out of those bean seeds which you planted? It is hoped that you are, for the seed is not plentiful and the food is needed badly. You all know that seed wrongly sowed in ground not well prepared and then poorly cultivated is wasted seed. And with the price of snap beans this year, a fellow can't afford to be careless with his patch.

With this in mind here are a few suggestions: Disc and harrow the ground before planting until it is fine and all the air pockets are worked out—the moisture will come up through and help germination. Do not sow the seed deeper than one inch; the roots will grow down into the moisture and fertilizer. The whole seed must push up through the soil and if it is down $1\frac{1}{2}$ inches or more they often do not make the surface, especially if the ground becomes crusted.

So far as fertilizer is concerned, almost every field can stand 500 to 600 pounds of a good analysis properly applied. Do not sow these amounts directly with the seed. Apply the fertilizer in bands as deeply as possible in the soil as with tomatoes; the only way to take off bumper crops is to fertilize and manure the soil heavily.

Now we come to that curse-provoking insect, the Mexican bean beetle. The important thing seems to be to float on 20 to 25 pounds of poison dust when the plants have 6 to 10 leaves or use a comparable spray instead. We use the terms *float on* because our experience indicates that is the best way to apply the dust. The less air currents moving the better the dust will settle on. The natural breezes cannot be helped, but the artificial currents created by the movement of the duster, plant leaves, and the blower on the duster can be minimized. The dusters should not move along too fast—6 or 7 miles an hour seems to be the maximum. The duster should be mounted on wheels high enough to keep any part of the apparatus from hitting, slapping, and moving any part of the bean plants. Last, and possibly most important, the dust blower should be throttled down to merely float the dust out of the nozzles and on the leaves with the least possible air movement. Dust cannot be forced on the plants by fast, hard blowing; the dust particles bounce around and most of them go up in the air and float away in clouds invisible to the eyes. It is also possible that two nozzles facing each other with a row of beans between them cause too much bouncing of the dust because the two currents of air-dust mixture hit one another. Consequently, it looks like the motto is: "Float on the dust."

Vegetable Marketing as Influenced By "War-Time Economy"

H. F. McFEELEY*

Something new has been added to the vegetable grower's list of perennial problems. A year ago, shortages of seed, fertilizer, spray materials, equipment, and other production facilities were a dark cloud on the horizon. The prospects for harvest help, tires, trucks, and packages were not bright. None of these difficulties have been eliminated. They are still present though some of them seem less ominous.

Price always has been the principal cause for concern on the part of vegetable growers. Glutted markets and low prices for some vegetables were expected at certain times of the year. Most growers considered themselves fortunate if they did not have to sell at a loss part of the time. Usually, however, there were times during the season when prices were good. The average of the high and the low enabled them to keep going.

The new thing that has been added to the list of problems is price control. Price ceilings may cause farmers to sell at very low prices during part of a season and at the same time be unable to get high enough prices during another part of the season to make a profitable average.

The war has more clearly emphasized the interdependence of nation and individual upon individual. The consumer, though he does not have a full realization of the problems involved, may have become a little more aware of the fact that food does not "just grow"—that it takes work and equipment and money to make available at the nearest store, ample supplies of a wide variety of food. He is beginning to realize the importance to the national welfare of the agricultural producer. More people than for many years realize their dependence upon the farmer.

On the other hand, the thoughtful producer is beginning to see that he does not produce for himself but for other people. In order to produce he requires material and labor that could be used for other purposes. His use of these things must be justified if he is to continue to receive them.

When everything was plentiful, it apparently mattered little if some things were not used wisely.

* Mr. McFeeley is Extension Specialist in Marketing, Rutgers University, New Brunswick, N. J.

Victory Gardens in Philadelphia

C. F. C. STOUT*

The Pennsylvania Horticultural Society (1600 Arch Street, Philadelphia, Pennsylvania) is glad to report on the status of the Victory Garden movement among its members.

Many of the members are reaping their first crops of vegetables, and in addition to providing food for their tables this summer, they are canning the surplus for use next winter. The amateur gardeners have encountered many difficulties—adverse weather, insect pests, plant diseases, and the rapid growth of weeds. Although somewhat discouraged at times, the Victory Gardeners are accepting conditions philosophically and are trying hard to overcome the obstacles. A universal result of their experience is that the amateurs have much more sympathy than ever before with the problems of the commercial grower, and they have acquired a great deal of respect for the commercial grower's ability to produce results.

In order to permit the Victory Gardeners to show the fruits of their labors, The Pennsylvania Horticultural Society is planning a Victory Garden Harvest Show to be held in a tent on a plot of land along the Parkway between Sixteenth and Seventeenth Streets, in Philadelphia, on September 15 and 16. Amateur and professional gardeners are invited to participate and classes will be arranged for both groups.

* Mr. Stout is president of The Pennsylvania Horticultural Society.

The Victory Garden Movement

J. HORACE McFARLAND*

It happens that it was my duty the last week of June to travel 250 miles north through Pennsylvania and Central New York to visit a great rose nursery. On the way I saw many miles of Victory Gardens, if they had been put end to end, and the astonishing thing was that in most cases they were growing well and were in good order.

From my standpoint, a worth-while thing to do would be to plan to interest the Victory Garden folks in small fruits and dwarf fruit trees, now easily available and providing a very worth-while extension of the Victory Garden idea. It is possible to obtain what I may properly call backyard apple trees, produced on the famous Malling stocks.

* Mr. McFarland is nationally known in horticultural circles and has a world-wide reputation in printing and color reproductions.

Variety Test of Peas at State College, 1943

WARREN B. MACK

Records have just been completed on fifty-two varieties and strains of peas tested this spring at State College. These trials brought forth some worth-while information on the new or improved stocks available to Pennsylvania growers of peas for market, canning, or freezing.

Only sweet varieties were included in the tests. Of these, the earliest to reach the harvesting stage were several small podded canning varieties, including Surprise, Early Sweet, and Mardelah, of which practically the whole crop was ready for picking on June 18, 71 days after planting. World's Record, Montana Monarch, and Mammoth Podded Extra Early were nearly as early, with about a half to two-thirds of their crop ready for harvest at the same time. Montana Monarch, a large-podded early type, had very good quality, and appeared worthy of further trial. Both pods and peas were dark green.

Little Marvel and several strains of Thomas Laxton matured four days later, or in 75 days. Wilt resistant strains of the latter appeared to excellent advantage, though they were slightly later than the other strains. S 54 and Teton were outstanding among the wilt resistant strains, with somewhat longer pods and more peas per pod on the average than were produced by other strains; this yield of certain of the ordinary non-resistant strains, however, was somewhat larger than that of the wilt-resistant ones.

Lincoln, a new canning variety in the season of Early Perfection, appeared to good advantage. Vines were of medium height; pods were long, and the peas, averaging nearly six to the pod and running as high as nine, constituted 62 per cent of the total weight of the pods. Nearly 60 per cent of peas were in sieve size 4 or smaller.

Pride and Canner King were excellent among the larger-seeded canning types. S 219, Main Crop Freezer, producing large, dark peas and dark pods, appeared very promising for the purpose for which it was bred.

A complete report on all the strains, including information on vine and pod characteristics, yield, and proportion of the peas in different sieve sizes, will be released at an early date. Other variety trials which will be reported later are those now in progress on tomatoes, sweet corn, pole snap beans, lima, and soy beans.

Lettuce Breeding at State College

M. T. LEWIS

Experimental work at State College as reported in these notes covers trials of leading head lettuce varieties and of hybrids produced by crossing them. This work has been in progress for a number of years. The plants are started in the greenhouse and transplanted to the field around April 20 with maturity from June 10 to 25. Many good hybrids have resulted from these crosses and are now under test.

The 1943 trials of commercial varieties show some interesting results quite in agreement with records of the last three years. The earliest-maturing hard-heading variety satisfactory for market purposes is Cosbia 40. It has maintained a consistent first place over many years. This variety is very uniform, having a rather small frame and flattened round head of medium size which is extremely solid. Its foliage is a good dark green and well savoyed. This variety is now listed by seedsmen and deserves your attention.

For market purposes Cosbia 40 should be followed by Imperial 44 and 847, two varieties which are similar in performance as shown in repeated tests at State College. When grown side by side in large blocks Imperial 44 and 847 show very little difference in the appearance of mature heads and plants. Neither variety is uniform in shape of head; in both of them conical and flat heads are found. Under some conditions Imperial 847 may make a larger frame and head than Imperial 44 and it may be somewhat later in maturing. When using these varieties for crossbreeding a characteristic type of head must be established in the breeder's mind for each variety. On this basis choice of Imperial 44 plants for breeding and selection purposes has been toward a conical head on a large frame, well provided with outside wrapper leaves which form a protection for the head in an upright spiral arrangement. For Imperial 847 the head type has been more nearly round and flattened. In resistance to tipburn Imperial 44 seems to be superior to Imperial 847. As the time of maturity approaches these two varieties may show excessive wilting during dry spells. For a main market crop both of these varieties are recommended, though growers may have found one or the other better suited to local conditions.

Vegetable growers should have a preview of two new summer-heading varieties which give promise of definite future value for market purposes. These are Imperial 456 and Great Lakes. At the present time these varieties are not uniform but seed growers are

working on them and reliable strains should be available in a few years. The outstanding feature of these varieties is that they will mature hard heads in mid-summer from seed sown directly in the field in succession. Both are hybrids of western origin, are quite similar in appearance and performance and are closely related in their hybrid ancestry. They are characterized by a distinctive grass green color, brittle foliage, prominent midribs, and extremely hard heads. The variation in head type is the same within each variety, running from round, bald and bleached heads having smooth flattened wrapper leaves to more nearly conical heads well enclosed by ruffled upright outer foliage. Regardless of their shape, the heads of each variety are extremely solid, market desirability favoring those which are conical and well wrapped. Both varieties are slow-growing and withstand summer heat, appearing erect and fresh even in dry weather. As these varieties exist today from seed supplied by a leading California grower, though neither variety runs true to type, the choice is Imperial 456 over Great Lakes. It is recommended that growers try Imperial 456 in a limited way. From plants started in the greenhouse it will mature heads in season between Cosbia 40 and Imperial 44, while from seed sown in the field it will provide a summer crop in succession.

Crosses made at State College of Imperial 44 by Cosberg and of Great Lakes by Imperial 847 and 44 have resulted in hybrid plant selections which are as early in Cosbia, as large as Imperial 44, as solid as Great Lakes and generally excellent. Some difficulty has been encountered in securing seed from selected heads in that the harder heads, being the most desirable individuals to select for seed production, are the very ones from which it is most difficult to obtain seed. In addition and contrary to the breeder's high hopes, superior individual hybrid plants do not always produce a uniform and desirable progeny in the next generation. However, seed stocks of promising hybrid strains are being built for Pennsylvania trials in the near future. These will be designated by the variety name of Pennberg with numbers to distinguish the different strains.

Tomato Survey, Tomato Picking Leaflet

A summary of 1942 ten-ton tomato production practices is now being prepared for distribution through County Agents. Additional duties in wartime production work caused the delay. Manure, rotation with clover sod, an average of 700 to 800 lbs. of fertilizer (900 to 1,000 in Bucks Co.) with one-half using plant starter, 90% planted in May, mostly Rutgers, 96% with a 90% or better stand, of plants spaced 12-16 square feet are some of the backgrounds of ten-ton yields, but much research is needed on tomato production practices.

Leaflet 100, Picking Tomatoes for the Cannery, will be available from your County Agent in August. It will show U.S. Grades in color.

SOLDIERS OF THE SOIL, ATTENTION!

Are you using a complete fertilizer? To be complete, a fertilizer must contain all the elements the soil lacks. The average commercial fertilizer contains only nitrogen, potash, and phosphoric acid. Scientific growers now know that mineral elements are equally important: that vegetables with vitamins cannot grow in soil poor in minerals.

*Make the fertilizer you use complete!
Mineralize it by adding:*

Es-Min-El

Supplies all essential mineral elements balanced in soluble form: Manganese, Zinc, Copper, and Iron, plus Magnesium, Boron, and Cobalt.

USE MODERN METHODS TO PROTECT YOUR CROPS:

Tennessee Tri-Basic Copper Sulphate - 53% Copper

For effective and economical control of persistent diseases such as blight on potatoes and tomatoes. Used as dust or spray.

Tennessee 34% Copper Fungicide

For a preventive dust on tomatoes, beans, carrots, onions, and other truck crops.

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TENNESSEE CORPORATION
ATLANTA, GEORGIA LOCKLAND, OHIO

Some Timely Vegetable Insect Notes

J. O. PEPPER

Mexican Bean Beetle

The infestation from overwintering adult beetles on early crops of beans has been somewhat spotted. We will soon be getting the first generation adult beetles and then we can expect general infestations in both snap beans and lima beans.

The next generation of beetles can be materially reduced if bean growers large and small will destroy the early crop of bean vines as soon as the bean crop is harvested. In this way large numbers of immature stages will be killed.

Late crops of snap beans and lima beans will require more attention and more application of dust or spray materials than the early crops.

Rotenone dusts or sprays are still the most effective and safe to use on beans. When you dust or spray beans the place to aim at is the undersides of the leaves. That is where the feeding takes place. The dust will stick to the leaves best if applied in early morning or late afternoon. However, commercial growers can dust throughout the day provided a 10-foot trailer apron is used behind the machine.

Carefully watch late snap beans and lima beans for egg masses and as soon as they start hatching put on the first application of dust or spray materials.

European Corn Borer

In Southeastern Pennsylvania where two generations occur each year a heavy infestation is developing. Some potato fields show quite a heavy infestation with as many as fifteen borers in one hill. Early sweet corn is also heavily infested with 35 borers present in some stalks. Infestations have also been found in tomato stalks, stems of many flowering plants around the home, and in pithy stem weeds.

Both large and small *sweet corn growers* are urgently requested to destroy early sweet corn stalks immediately after the crop is harvested. This can be done by plowing stalks under or putting them in silo. Such a procedure will kill hundreds of immature corn borers and greatly reduce the second generation of adult moths which will occur in July and August.

In some other states sweet corn growers have used insecticide control measures with some success. Dusts have been used mainly

consisting of either a fixed nicotine or rotenone. These are probably practical for the small sweet corn grower but for large acreage we are confronted with the machinery problem of applying the dusts.

Colorado Potato Beetle

This insect is fairly abundant this year on potatoes and tomatoes and is doing serious damage in several places. On potatoes it can be easily controlled by placing 3 pounds of either lead arsenate or calcium arsenate in each 100 gallons of Bordeaux spray. On tomatoes the insect can be controlled by spraying with 3 pounds of lead arsenate in 100 gallons water or dusting with 1 part of lead arsenate mixed with 5 parts of a carrier such as hydrated lime.

Cabbage Worms

The cabbage looper, imported cabbage worm and a few other caterpillars are feeding on cabbage and doing serious damage in some localities.

The same insecticide control as given in the May issue of the Vegetable Growers' News holds for these insects.

Demonstrations on Varieties and Fertilizers

JESSE M. HUFFINGTON

Demonstrations conducted in co-operation with County Agents are beginning to show results this year. Of particular interest at this time are variety demonstrations on peas for canning and quick-freezing and head lettuce. Sweet corn, carrot and tomato crops are among those just beginning to show the results of proper selection of varieties for greatest productivity and adaptability to local soil and climatic conditions.

A complete record of demonstrations will be available.

STOKES TOMATO SEED

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VINCENTOWN, NEW JERSEY

1943 Pea and Bean Diseases—Some Control Suggestions

R. S. KIRBY*

The wet weather during May and early June was favorable for disease development on vegetable crops that were in a susceptible stage during the rainy period.

Peas were hardest hit by diseases developing during the wet period. Root rot, bacterial blight and ascochyta blight became destructive in many fields.

Root rot is nearly always severe during seasons of heavy rainfall. This disease is controlled by crop rotation and the planting of peas in well drained soil. Seed treatment may in some cases reduce root rot but since the fungi causing root rot attacks the plants after they are up, they are beyond the protective range of seed treatment.

This year bacterial blight and ascochyta blight started to develop on peas soon after they came through the ground and the wet weather helped to spread these diseases until they seriously reduced the yield in many fields. Seed treatment, dusting or spraying have little effect on these blights. The effective control measures consist of destroying or deeply plowing down crop refuse, practicing a three year crop rotation, and obtaining certified seed from the semi-arid regions of the Northwest.

In numerous demonstrations during the past two years treating seed with one to one and one-half ounces of Spergon per bushel has increased the stand and yield of most types of peas by at least 15 per cent. With Alaska types the increase from seed treatment has been about five per cent. It has been shown that a seed that fails to germinate quickly and produce a strong plant is often killed by soil fungi before the seedling can emerge and become established. Further that when the pea seed prematurely decays the seedling is weak and sickly. High soil moisture between planting and seedling emergence favor disease development. In soil with over 30 per cent moisture poor stands usually occur with untreated seed. Under the same unfavorable conditions seed treatment insures markedly increased stands. In soil with around 23 per cent moisture the actives of the fungi are reduced to such an extent that untreated seed gives fairly good stands. With low soil moisture seed treatment usually gives a smaller increase in stand.

* Dr. Kirby is in charge of Plant Pathology Extension at The Pennsylvania State College.

It is good insurance, and an investment paying big dividends to treat all types of peas except Alaska with Spergon before planting.

Practically all strains of the Alaskan type, such as Alaska, Wilt Resistant Alaska, Superlaska, etc., are much more resistant to seed decay than other types. While the return from treating the Alaska types averages about one-third as much as for treating the other types it will pay to treat them if peas must be planted in ground having had peas the previous year or when peas are planted in soil that will have a high moisture content before seedling emergence.

Lima bean seeds are so susceptible to decay organisms in the soil that many growers consider poor stands as natural. High soil moisture caused by rain immediately after seeding and any other condition which retards seedling emergence favors seed decay from soil organisms. Treating lima bean seed before planting with one to one and one-half ounces per bushel of Spergon often gives as much as twenty to thirty per cent increase in stand and yield. In one demonstration in Lancaster County this spring the stand of strong pole lima bean plants was increased from 26 per cent of the untreated seed producing strong plants to 58 per cent of strong plants being produced by Spergon treated seed.

Downy mildew of lima beans in 1942 was more destructive on late planted fields than it should have been. One 12-acre field of baby bush lima beans in York County was almost a complete loss last September from downy mildew. This year in early June a downy mildew was found on young lima bean seedlings. The occurrence this summer of a combination of cool nights, warm days and abundant moisture could result in further serious losses.

In controlling downy mildew one should know that the disease lives from year to year in the seed and on diseased vines and pods and that once downy mildew starts in a field it can be spread by rain, animals, and anything passing through a field such as cultivating implements. Effective control therefore requires adopting a control program such as the following:

1. Plant seed known to be free of downy mildew, preferably western grown seed.
2. Destroy diseased vines and pods or follow a three or four year rotation. Since the fungus causing downy mildew of beans does not attack other crops they can be included in the rotation.
3. Stay out of bean fields wet with dew or rain since the disease can be most easily spread when the plants are wet.
4. Where the disease has been present last year or is starting this year dusting and spraying must be resorted to in order to save the crop. Spraying with 8-8-100 Bordeaux mixture gives effective control and increases

the yield of marketable pods, when the disease is present. However, when conditions are not favorable for downy mildew development, yields from sprayed plants may be lower than from mildew-free unsprayed plants. Dusting with 20-80 copper lime dust gives fairly effective control if it is applied to wet plants. When spraying or dusting the first application should be applied as the crop comes into bloom (usually about mid-July). Three additional applications are usually needed at 7 to 10 day intervals. Where a grower does not feel he can follow a full spraying or dusting program the disease can be checked if a careful watch is made for the first appearance of downy mildew and a spray or dust is applied as soon as the first few mildewed plants appear.

Bean Anthracnose in 1942 seriously reduced yields and quality of string beans in many fields. This year the wet weather has allowed the disease to get started in some fields and if long wet periods occur the disease likely will again be destructive. The fungus causing anthracnose lives from year to year in the seed and on dead parts of bean plants. In 1942 it was found that every serious outbreak of the disease could be traced to the planting of eastern-grown bean seed or to where diseased plants were not destroyed. An effective control program must include several control measures.

1. Use disease-free seed grown under arid conditions in the far west. Last summer the writer visited bean fields in the far west and failed to find anthracnose.
2. Destroy diseased plant parts or follow a three or four year rotation.
3. Stay out of bean fields when they are wet with rain or dew since one is almost certain to spread the disease if they go into wet fields.
4. There are several different strains or types of bean anthracnose. Some varieties of beans like Idaho and Wisconsin Refugee, Wells Red Kidney, Geneva York, Perry Mayrol, Castile Mayrol, Honeoye Pea and Robust Pea are resistant to one or more strains and their use would reduce loss from the disease.
5. Where anthracnose has started in a field spraying with 8-8-100 Bordeaux mixture will, if started before the disease is too severe, reduce the loss and increase the quality of the beans. The first spray should be applied as the pods start to form or as soon thereafter as the disease is observed. Additional sprays should be applied at 7 to 10-day intervals as long as the disease is serious.

Vegetable Gardening Staff Changes At The Pennsylvania State College

Elisha M. Rahn resigned as Assistant Professor of Vegetable Gardening in the Department of Horticulture at The Pennsylvania State College on May 1 to go into partnership with his father, Robert M. Rahn, operating a farm near Geigertown in Berks County. Both father and son have been members of The Pennsylvania Vegetable Growers' Association for many years and usually have attended and participated in the annual meetings. Elisha, also, has contributed several articles for the News, which we hope he will continue. We are confident that this partnership will result in the successful production of essential foods. Our best wishes go to Elisha, his wife, Agnes, and the two young sons.

Martin L. Odland on July 1 took up his duties as Associate Professor of Vegetable Gardening in the Department of Horticulture at The Pennsylvania State College, taking the position formerly held by E. M. Rahn. During the past six years he was engaged in teaching and research work in vegetable gardening at the University of Connecticut, specializing in variety studies and breeding.

G. J. Stout has temporarily been assigned to Agricultural Extension, where he is assisting particularly in the home (Victory) garden program. Dr. Stout was particularly interested in teaching and research work on irrigation and dehydration.

Hybrid Sweet Corn Seed

• LINCOLN — new "All-American" selection for 1942
SPANCROSS—"All-American" for 1941. Marcross, and Carmel-cross. All four developed by the Connecticut Experiment Station. Also, Golden Cross Bantam. All seed grown in Connecticut. Send for descriptive circular for home and market growers.

Huntington Brothers
Box H, Windsor, Conn.

Frank Edgar Manning

With the passing of Frank Manning, May 17, 1943, the Vegetable Growing Industry and the agricultural co-operative movement in the State of Pennsylvania has lost a tireless worker and a true friend.

Frank Edgar Manning was born in Middletown, Pennsylvania, September 7, 1885. He became actively engaged in co-operative work throughout Pennsylvania when he joined the faculty of The Pennsylvania State College in Agricultural Extension October 1, 1929. His wide knowledge of co-operative laws and his interest and devotion to the co-operative movement in the State resulted in the leaders of the movement looking to him as a man whose opinion was respected and whose judgment was valued by all.

He was an ardent worker and a man of definite convictions. He had many friends among the vegetable growers of the State as well as his close associates on the faculty and the co-operative leaders over the State of Pennsylvania.

The Pa. V. G. A. Membership List—1943

(Continued from the May issue)

Wenger, Norman F., Manheim, R. 2, Pa.	Woinovick, Anthony, Jr., Chalfont, R. D. Pa.
Wenker, Harold E., Bustleton, Pa.	Wolf, Joseph, Wolf Orchards, Allentown, R. 1, Pa.
Wenker, Ray W., Bustleton, Pa.	Wolf, Paul R., Myerstown, R. 2, Pa.
Wentz Bros., Ambler, Pa.	Wolfe, H. A., York Springs, R. 1, Pa.
Wentzel, Foster E., Selinsgrove, Pa.	Wolfe, Wendell R., Mifflinburg, R. 1, Pa.
Wertman, Charles L., Coopersburg, R. 2, Pa.	Wolff, Paul R., Myerstown, R. 3, Pa.
Wetzel, Harry, Hanover, R. 2, Pa.	Wonder, George, Hanover, R. 3, Pa.
Whatley, John, Bristol, R. 1, Pa.	Wonder, Ralph H., Hanover, R. 3, Pa.
Whitcomb, Paul H., York, R. 4, Pa.	Woods, E. Wilmer, Connellsburg, R. 2, Box 232, Pa.
White, W. R., State College, Pa.	Worley, Charles H., Hanover, R. 4, Pa.
Whitenight, Myron, 816 Market St., Bloomsburg, Pa.	Worley, George R., Hanover, R. 4, Pa.
Wietecha, Thomas J., Sellersville, R. 1, Pa.	Worley, Ralph, Hanover, R. 3, Pa.
Wiggins, A. W., Clarks Summit, R. 2, Pa.	Wright, Dr. F. W., Eichelberger St., Hanover, Pa.
Wildasin, Charles, Hanover, R. 2, Pa.	Yeagle Bros., Bristol, R. 2, Pa.
Wildasin, Earl, Hanover, R. 2, Pa.	Yerger, Claude R., Apollo, R. 3, Pa.
Wildasin, Ezra, Hanover, R. 3, Pa.	Yingling, H. E., Spring Grove, R. 3, Pa.
Wildasin, Henry, Frederick St., Hanover, Pa.	Yoder, Abe S., Sr., Belleville, Pa.
Wildermuth, Harry J., Pine Grove, R. 2, Pa.	Yoder, Harold O., Mechanicsburg, R. 2, Pa.
Wilhelm, H. H., Abbottstown, R. 1, Pa.	Yoder, Ira L., Middleburg, Box 117, Pa.
Williams, L. A., York Springs, R. 1, Pa.	Yoder, Jacob C., Oley, R. 1, Pa.
Williams, A. B. C., York Springs, Pa.	Yohe, William J., Spring Grove, R. 3, Pa.
Wills, R. W., Buffalo Mills, Pa.	Young, Clarence E., Lancaster, R. 2, Pa.
Willson, John M., Fayette City, Pa.	Young, Gilmore, Spring Grove, R. 1, Pa.
Wilson, Irvin, Hanover, R. 2, Pa.	Young, Reeder, Washington Boro, Pa.
Wilson, Theodore S., Richboro, Pa.	Zartman, Ervin, Spring Grove, R. 2, Pa.
Wink, Willis W., Bristol, R. 1, Pa.	Zehner, Clyde A., U. S. Dept. of Agriculture, 928 North Third St., Harrisburg, Pa.
Winters, Oscar, 998 Carlisle St., Hanover, Pa.	Zeigler, William, Spring Grove, R. 1, Pa.
Wise, J. Harvey, Commodore, Pa.	Zimmerman, Chas. S., 500 Liberty Ave., Pittsburgh, Pa.
Witmer, Elam W., Ephrata, R. 2, Pa.	Zimmerman, Harry A., Ivyland, Pa.
Witwer, Charles K., Rothsville, Pa.	Zimmerman, M. M., Stevens, R. 1, Pa.
Witmer, George D., Narvon, R. 1, Pa.	Zimmerman, William, Hallowell, Pa.
Witwer, George K., East Earl, R. 1, Pa.	Zook, Elam B., New Holland, R. 2, Pa.
Wohleber, Stephen, 3064 Mt. Troy Road, N. S. Pittsburgh, Pa.	Zook, Eli S., Sheridan, R. 1, Pa.

PENNSYLVANIA VEGETABLE GROWERS' NEWS

PUBLISHED QUARTERLY—MARCH, MAY, JULY AND DECEMBER

Special Ten-Ton Tomato Club Issue in January

Vol. XIII State College, Pa., December, 1943 No. 4

Publication of The Pennsylvania Vegetable Growers' Association

Annual dues are \$1.00, 80 cents of which is for subscription to the Pennsylvania Vegetable Growers' News.

President	Ray W. Wenker, Bustleton
Vice-President	Louis Orient, Bridgeville
Sec'y-Treas.....	Jesse M. Huffington, 625 Holmes St., State College
Directors.....	R. R. Comly, Bustleton Harry Hopkins, Clark's Summit K. S. Philip, Pittsburgh (16), Ridgefield Ave. R. B. Stutzman, Cramer A. C. Thompson, Morrisville

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A Personal Message From Your President

Again we come to another milestone in the history of our Association, the passing of the 1942-43 administration and the road leading to the future.

It has been a pleasure to have served as your President, during the past two years. I wish to express my sincere thanks to our able Secretary, Jesse M. Huffington, and the men serving on the various committees, to our Extension Service, Department of Agriculture, and all who made possible the success of the Pennsylvania Growers' Association.

Reminiscing through the records, we see the birth of our Vegetable Growers' News, which has been a forward step in our Association, probably not as profitable financially as I had hoped, but due to restrictions on materials, our advertisements were not as large as we had anticipated but with our constantly increasing circulation I have no fear of its future. As to memberships we have increased in the last two years from 187 to 909. Credit for this is due to our splendid membership committee and to you as an individual member. Keep up the good work for our next president and officers.

Now is the time to get supplies and machinery for next year's production. By all indications, packages will be an item which may require your early thoughts. Current production on container veneer is estimated to be running short of needs by about 20 per cent.

In summarizing the accomplishments of our industry through the past two years, I can only say "hats off" to the vegetable growers for their splendid co-operation in producing the necessary vegetables needed in helping win this war.

May the Season's Greetings bring you and yours Peace and Happiness and the New Year, Health and Prosperity.—Ray W. Wenker.

A Word About Our Advertisers

It would not be possible to publish the NEWS without our advertisers. In spite of shortages, some advertisers have continued with us. This should not be forgotten, because they are befriending us in a time of real need.

When you write our advertisers, please say you saw their ad in the NEWS.

Our publication has a circulation among the largest users of fertilizers, machinery, spray material, and other materials in Pennsylvania, and the industry is continuing to grow at a rapid rate. So please tell your supply men that they need to advertise with us, too.

—4—

The Value of Your Membership Dollar

1. Four issues of the NEWS.
2. A special Ten-Ton Tomato Club issue.
3. An annual meeting, where growers are able to discuss and act upon their own problems, in addition to obtaining timely information.
4. Sectional meetings, when needed to lessen travel.
5. Affiliation with the Vegetable Growers' Association of America, North East Vegetable and Potato Council, and Pennsylvania Council of Farm Organizations.
6. Reduced rates for the Market Growers' Journal.

You are urged to send—now—\$1, payable to The Pennsylvania Vegetable Growers' Association, State College, Pa. If you will please send in your neighbor's membership along with yours.

INTRODUCING FOR TRIAL

Early Market Tomato

Adapted to production on stakes or trellises where early maturity for the market is desired. Liberal fertilizer applications required for maximum fruit size, but large amounts of nitrogen fertilizer should be applied only after fruit setting. Moderately open but vigorous foliage, relatively little fruit cracking in commercial trials this season, good outer wall but somewhat large seed cavities, excellent color, globe shaped.

Maturity in Valiant season, ahead of most John Baer selections

Early Canner Tomato

Selected to accommodate a few canner customers desiring to start the season a week ahead of Rutgers. Fruit color, deep red; fruit flavor and interior solidity, excellent with many small cells; size of fruit, medium large; tendency to cracking, similar to Rutgers but has a thinner skin; foliage vigor and coverage, excellent.

Yields this season in this area were larger than Rutgers in every case

LIMITED SEED STOCKS AVAILABLE

Price: \$1.00 per ounce, \$3.00 a $\frac{1}{4}$ pound and \$10.00 a pound.

GLICK SEED FARMS

Smoketown

Lancaster County

Penna.

—5—

Annual Financial Statement for 1943
 THE PENNSYLVANIA VEGETABLE GROWERS' ASSOCIATION
 JANUARY 11 - DECEMBER 15, 1943

RECEIPTS

Memberships (237 for 1944)	\$ 986.00
Advertisements	908.93
Ten-Ton Reports	517.00
Contributions	160.00
Total	<hr/> \$2,571.93

EXPENDITURES

Annual Meeting	\$ 26.49
Ten-Ton	982.48
News	511.59
Miscellaneous	413.21
Total	<hr/> \$1,933.77
Balance	\$ 638.16
Bank Balance January 11	260.95
Total	<hr/> \$ 899.11
Bank Balance	\$ 890.04
Cash on Hand	9.07
Total	<hr/> \$ 899.11

W. M. R. WHITACRE,
 W. B. NISSLAY, Auditors

JESSE M. HUFFINGTON
Secretary-Treasurer

Hybrid Sweet Corn Seed

● LINCOLN—new "All-American" selection for 1942
 SPANCROSS—"All-American" for 1941, Marcross, and Carmel-cross. All four developed by the Connecticut Experiment Station. Also, Golden Cross Bantam. All seed grown in Connecticut. Send for descriptive circular for home and market growers.

Huntington Brothers

Box H, Windsor, Conn.

The Pennsylvania Vegetable Growers'
 Association

Annual Meeting
Harrisburg, Pa.

Tuesday Morning, January 18, 1944

MORNING SESSION: New Developments.

Chestnut Street Hall, Assembly Room

- Chairman: Ray W. Wenker, President, Bustleton, Pa.
 10:00 A.M. President's Address.
 10:15 A.M. "Corn Borer Control"—J. O. Pepper, State College, Pa.
 10:45 A.M. "Vegetable Research Program at the U.S. Regional Laboratory"—Edward J. Kelly, Eastern Regional Laboratory, Wyndmoor, Philadelphia, Pa.
 11:30 A.M. "Pennsylvania Carrots," Natural Color Movie—Charles K. Hallowell, Philadelphia, Pa.
 11:45 A.M. "Vegetable Growers' Association of America"—Report of the annual conference, A. C. Thompson, Morrisville, Pa.
 12:00 Noon Lunch.

Tuesday Afternoon, January 18

AFTERNOON SESSION: Soil Fertility and Labor Problems.

Chestnut Street Hall, Assembly Room

- Chairman: H. H. Hostetter, Sinking Springs, Pa.
 1:30 P.M. "New Developments in Soils and Fertilizers"—Firman E. Bear, Rutgers University, New Brunswick, New Jersey.
 2:30 P.M. "Farm Labor Program Meets 1943 Emergency Needs"—J. M. Fry, Director, Agricultural Extension Service, State College, Pa.
 "Solving the 1943 Farm Labor Problems in Bucks County"—William F. Greenawalt, County Agent, Doylestown, Pa.
 "Using Unskilled Labor on My Farm"—Gilbert S. Watts, Vegetable Grower, Bellwood, Pa.
 Movies in natural color.

Wednesday Morning, January 19

MORNING SESSION: Obtaining Supplies, Interpreting Regulations and Making Adjustments.

Chestnut Street Hall, Auditorium

Joint Session with State Horticultural Association of Pennsylvania.
Chairman: Louis Orient, Vice-President, Bridgeville, Pa.

10:00 A.M. "Purchasing Insecticides and Fungicides for 1944"—

Lea S. Hitchner, Agricultural Insecticide and Fungicide Association, 285 Madison Ave., New York, N.Y.

11:00 A.M. "Some Problems Before Us and How to Meet Them"—
Porter R. Taylor, Co-operative Fruit and Vegetable Association, Munsey Building, Washington, D.C.

12:00 Noon Lunch.

Wednesday Afternoon, January 19

AFTERNOON SESSION: Business Meeting, New Production Methods, Canning Crops.

Chestnut Street Hall, Assembly Room

Chairman: Louis J. Wagner, North East, Pa.

1:30 P.M. Business Meeting.

2:00 P.M. Ten-Ton Tomato Awards—

Miles Horst, Pennsylvania State Secretary of Agriculture, Harrisburg, Pa.

Special Awards of The Pennsylvania Canners' Association—One \$25 U.S. War Bond.

The Highest Quality—J. R. Stuart, President, Somerset, Pa.—One \$25 U.S. War Bond.

The Largest Yield per Acre—W. A. Free, Secretary, York, Pa.

2:30 P.M. "Growing and Harvesting Sweet Corn the 4-H Club Way"—C. C. McDowell, Somerset, Pa.; John Knepper and Robert Mowery, R. 2, Berlin, Pa.

3:00 P.M. "Getting Beans Started, Harvested and Marketed"—A. H. Rosbough, Engle Rd., Berea, Ohio.

"Edible Soybeans—How They Grow"—

P. G. Niesley and Harry Mellick, Bloomsburg, Pa.

3:30 P.M. Pennsylvania Grows Peas:

"Recent Developments—Pea Diseases, Insects, Production"—H. S. Sloat, 202 Federal Bldg., Lancaster, Pa.

"Speed in Harvesting"—

Claire Allison, Hanover, R. 3, Pa.

George Gaugler, Port Trevorton, R. 2, Pa.

Myron Whitenight, 816 Market St., Bloomsburg, Pa.

TOMATO DAY

Recreation Hall, Municipal Market
South Third Street, Chambersburg, Pa.

Monday Afternoon, January 24, 1944
CUMBERLAND VALLEY

Cumberland, Franklin and Fulton Counties, Pa., and Washington County, Md.

Chairman: J. H. Knodel, Chambersburg, Pa.

1:00 p.m. "New Soil Management and Fertilizer Practices", Fred V. Grau, State College, Pa.

2:00 p.m. Presentation of Ten-Ton Tomato Awards,
Judge Watson R. Davison, Chambersburg, Pa.

2:30 p.m. Ten-Ton Tomato Production Practices,
Jesse M. Huffington, State College, Pa.

and

Reports from Winners in Quality and Yield, 2 to 7 and 7 or more Acres, Respectively.

3:00 p.m. Discussion of Growers' Problems,
Elmer Oller, R. 2, Smithburg, Md.

Committee

REFRESHMENTS

Elmer Oller, R. 2, Smithburg, Md., Chairman

John Benedict, R. 1, Waynesboro, Pa.

David H. Wenger, R. 3, Shippensburg, Pa.

Clifford Shindle, R. D., Greencastle, Pa.

Amos Mackey, R. 3, Shippensburg, Pa.

Ezra Bert, R. 1, Newburg, Pa.

G. B. Morrow, Roxbury, Pa.

Ralph H. Maun, Greencastle, Pa.

L. D. Fero, Chambersburg, Pa.

Ten-Ton Tomato Club

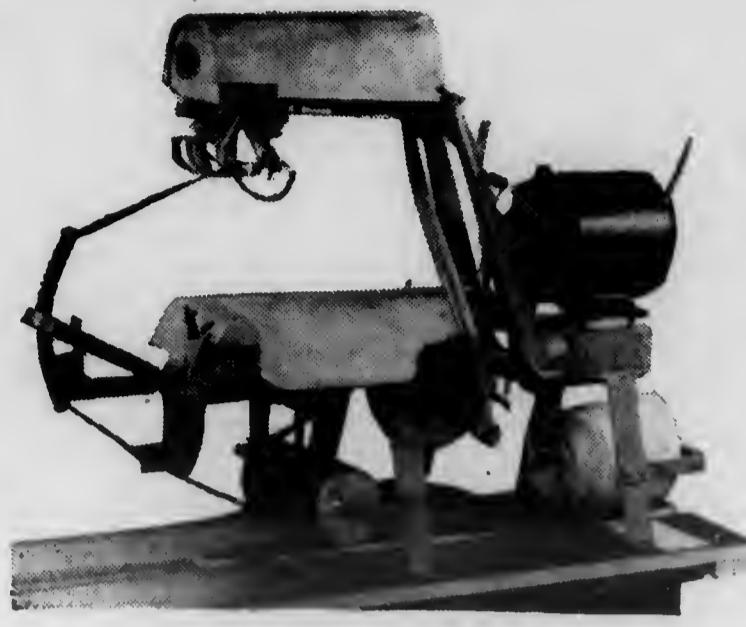
The Pennsylvania Vegetable Growers' Association

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Marketing
with Less Help*



TORRENT BUNCH VEGETABLE WASHER



FELINS ROOT CROP
WASHER

FELINS
MILWAUKEE 6.
WISCONSIN

TOMATO DAY
Martin Auditorium, Y. M. C. A.
Lancaster, Pa.
Wednesday, January 26, 1944
BERKS, CHESTER, DAUPHIN, DELAWARE, LANCASTER, LEBANON
AND SCHUYLKILL COUNTIES

Morning Session

Call to Order: F. S. Bucher, County Agent, Lancaster, Pa.
Chairman: Snavely Garber, Willow Street, Pa.

- 9:30 a.m. "The Tomato Disease Situation in Pennsylvania"—
R. S. Kirby, State College, Pa.
- 10:30 a.m. "Practical Methods of Applying Fertilizer to Tomatoes"—
C. B. Raymond, Ithaca, N. Y.
- 11:30 a.m. "Increasing Profits with Better Tomato Plants and
Planting Methods"—
H. S. Sloat, Lancaster, Pa.
- 12:00 Noon Lunch

Afternoon Session

Chairman: Milton Hershey, R. 3, Manheim, Pa.

- 1:00 p.m. "Getting Help to Pick the Tomato Crop"—
Raymond S. Hovis, Millersville, Pa.
- 1:30 p.m. "Avoiding Losses by Prompt Delivery of Tires"—
Local Ration Board Representative
- 1:45 p.m. "Eliminating Congestion at the Receiving Station"—
Grower-Canner Discussion
- 2:15 p.m. "Ten-Ton Tomato Production Practices," Discussion—
Jesse M. Huffington, State College, Pa.
Reports from Winners in Quality and Yield, 2 to 7 and 7
or more Acres, Respectively.
- 3:00 p.m. Presenting Ten-Ton Tomato Awards

Committee—H. W. Huffnagle, Quarryville, Pa., Chairman; Arthur Brown, Nottingham, Pa.; Snavely Garber, Willow Street, Pa.; Milton Hershey, R. 3, Manheim, Pa.; E. R. Royer, R. 3, Lancaster, Pa.; J. P. Heisey, Millersville, Pa.; John Schock, Washington Boro, Pa.; Paul Hess, R. D., Elizabethtown, Pa.; Aldus Myer, Lititz, Pa.; E. W. Montell, Camden, N. J.; Emerson Kane, Washington Boro, Pa.; L. D. Fero, Chambersburg, Pa.; Earl Gratzer, Lititz, Pa.; W. A. Poetker, Lititz, Pa.; W. R. Cameron, Peach Bottom, Pa.
Ten-Ton Tomato Club
The Pennsylvania Vegetable Growers' Association



WHEN the South Sea Islanders first got nails from Europe, they planted them—EXPECTING THEY WOULD GROW A CROP OF IRON!

Today, civilized men are again planting iron, zinc, copper and other metals, not in the form of nails but as soluble mineral salts—KNOWING THEY WILL GROW FINER CROPS OF VEGETABLES!

Scientific growers recognize that minerals in the soil are essential to healthy plants. They have found that scores of plant diseases are merely indications of a lack of minerals.

They have seen that plants grown in mineralized soil have more abundant foliage and are more resistant to winter freezes.

They have proved that mineralized plants produce vegetables with better flavor, finer texture, and improved shipping qualities.

Most important of all, they have learned that vitamins cannot exist without minerals: THAT VEGETABLES RICH IN VITAMINS CANNOT GROW IN SOILS POOR IN MINERALS.

Mineralize your soil and watch results with:

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A carefully balanced and easily soluble mixture of the mineral elements essential to healthy plants and healthy people.

WRITE US FOR FREE LEAFLET

The mark of quality

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ATLANTA, GEORGIA



TENNESSEE CORPORATION

CORPORATION

LOCKLAND, OHIO

TOMATO DAY

Tyro Grange Hall

U. S. Highway Route 202, Buckingham, Pa.

THURSDAY, JANUARY 27, 1944

BUCKS, LEHIGH, MONTGOMERY, NORTHAMPTON AND PHILADELPHIA COUNTIES

Morning Session

Call to Order: Wm. F. Greenawalt, County Agent, Doylestown, Pa.
Chairman: Ray A. Poorbaugh, Quakertown, Pa.

10:00 a.m. "The Tomato Disease Situation in Pennsylvania"—
R. S. Kirby, State College, Pa.

10:45 a.m. "Tomato Hybrid Introductions and 1943 Fermate Spray Tests"—
D. R. Porter, Riverton, N. J.

11:00 a.m. "Practical Methods of Applying Fertilizer to Tomatoes"—
C. B. Raymond, Ithaca, N. Y.

12:00 Noon Lunch

Afternoon Session

Chairman: Charles W. Humphreys, Somerton, Philadelphia, Pa.

1:30 p.m. "Better Handling, Planting and Spacing of Tomato Plants",
E. W. Montell, Camden, N. J.

Discussion,

George B. Wentz, Ambler, Pa.
Herman Heston, Newtown, Pa.
Harold J. Kellett, R. 1, Morrisville, Pa.

2:15 p.m. "Ten-Ton Tomato Production Practices"—Discussion,
Jesse M. Huffington, State College, Pa.
Reports from Winners in Quality and Yield, 2 to 7 and 7 or more Acres, Respectively.

3:00 p.m. Presenting Ten-Ton Tomato Awards—
Ray W. Wenker, Bustleton, Pa.

Committee—Ray A. Poorbaugh, Quakertown, Pa., Chairman; Charles W. Humphreys, Somerton, Philadelphia, Pa.; LeRoy Shutt, Chalfont, Pa.; Curtis A. Heebner, Worcester, Pa.; Julian S. Gancarz, Morrisville, Pa.; Walter Solly, Ivyland, Pa.; George B. Wentz, Ambler, Pa.; Herman Heston, Newtown, Pa.; E. O. Mastin, Quakertown, Pa.; E. W. Montell, Camden, N. J.
Ten-Ton Tomato Club
The Pennsylvania Vegetable Growers' Association

This Thief Steals \$75,000,000 Per Year From Farmers

HAIL is a thief! Every summer, hail storms rob thousands of American farmers of a valuable part of their year's income. The loss resulting from hail damage to crops averages \$75,000,000 per year, according to U. S. Department of Agriculture estimates.

Hail will steal into fields and orchards again next summer and take away thousands of farmers' chance of a harvest. When hail comes, there will be no more warning than a black cloud in the sky. Then, suddenly, growing crops will be destroyed or seriously damaged. No one knows just where hail will strike. For no section of the country is immune.

You cannot prevent hail, but you can prevent loss. Hail Insurance is your protection against a hail storm robbing you of a year's income. Your Hail Insurance on any crop should at least equal your cost of producing that crop. You can even protect part of your expected profits by purchasing a Policy that provides maximum coverage.

Hail Insurance is common-sense, down-to-earth protection against one of the unpreventable hazards of farming. The moderate cost of Hail Insurance is recognized as a necessary farm expense by the U. S. Government, which allows you to deduct premiums on Hail Insurance in figuring your net income for federal tax purposes.

Your crops, in 1944 will be more important to you than ever before. Don't let hail rob you! Be protected! Buy Hail Insurance early! You need this protection as soon as your crop has made a stand or your fruit is set.

See your local agent of: Aetna Fire Group; The North American Companies; or, the Springfield Fire Group. Or, write for your free copy of the booklet: *Protecting Your Cost of Production*. Address a penny postcard to: G. L. Booker, Supt., Hail Department, 90 John Street, New York 7, N. Y.

The Vegetable Growers' Association of America And The Vegetable Gardening Business

H. D. BROWN

The vegetable gardening industry in common with most industries has faced and solved more problems in 1943 than during any other year in history. Some of these problems are of interest primarily only to our members and families. Others are of vital interest to all.

THE MANPOWER PROBLEM

A survey conducted by your secretary indicated that the manpower problem is of far greater importance than any other problem. It concerns vegetable growers more than any other group of farmers, because our farms are small and deferment under selective service is most difficult for those who operate small farms. Our survey indicated that fifteen per cent of our membership were forced to reduce their acreage in 1943 because of lack of manpower.

This is important to the armed forces and to civilians because of the 1700 pounds of food that are consumed per person per year approximately 550 pounds are vegetables. Any program that necessitates the abandonment of the most fertile soil in the United States during the emergency that exists is extremely hazardous. Fortunately, we had an extremely favorable season, and the deficit of production was met by producing vegetables on the less fertile victory gardens where manpower was available. We will be extremely fortunate if we have another (third in a row) favorable season in 1944. Such a string of favorable seasons has probably never occurred before in the history of our country. To avoid a disastrous slump in vegetable production it is, therefore, necessary for all concerned to make sure that all fertile soil usually operated by trained gardeners with the aid of irrigation and labor saving machinery is fully utilized in 1944.

It is significant to note, from Governmental figures, that acreage increases of vegetables were secured in 1943 in every instance where prices were guaranteed by the government. It is also significant to note that with the exception of the victory gardening acreage all acreages were reduced when no prices were guaranteed.

Selective service boards and all other governmental officials must realize the grim consequences of removing any additional manpower from vegetable farms. Some of our affiliated organizations have also recommended that, in addition to the retention of all "key men" now on vegetable farms, requests should be granted for the release of "key men" (i.e., essential for the vegetable industry) who are now in the armed forces.

STOKES TOMATO SEED FOR 1944

"We build the road, others will make the journey"

—VICTOR HUGO

Profitable Tomato production starts with Tomato Seed that carries a strong pedigree.

The Stokes strains of Stokesdale, Master Marglobe and Rutgers are Tomatoes of that caliber. They have been bred by a 62-year-old firm which devotes its entire effort to our country's most important vegetable. We take pardonable pride in the fact that these Stokes strains now plant over $\frac{1}{4}$ of the American Tomato acreage for processing and for market shipment.

The strength of these stocks is deeply rooted in a breeding program which traces back for 20 generations. Our routine of producing two stock-seed crops per year is, we believe, unique in Tomato seed production. One of these matures in New Jersey in August; the other matures in Florida in March. Stock-maintenance and stock-improvement are carried on through single-plant selection and through hybridization. The latter has recently developed two interesting new strains which are now being perfected and which will be tested in twelve different areas in 1944.

Planters of Stokes Tomato Seed are protected by a package which is sealed with a certificate covering State Certification seed-disinfection (new Improved Ceresan), germination and date of the germination test. As a contribution toward holding the line, the prices for 1944 remain unchanged from our catalog prices of 1941, 1942 and 1943. Because of the extraordinary demands, our inventories are already heavily drawn against. Send for 1944 folder.

FRANCIS C. STOKES, Limited.

Breeders and Growers of Fine Tomato Seed

VINCENTOWN, NEW JERSEY, U. S. A.

The major manpower burden, however, must and should rest upon the shoulders of individual gardeners. I have visited many gardeners in some ten states during the 1943 season. In many instances sufficient help was secured to grow and harvest excellent crops of vegetables. In other instances, land, irrigation facilities, spray equipment, etc., were standing idle because of lack of help. Never before has the ability to secure and handle the services of others offered such a challenge and opportunity to market gardeners. I am happy to report that our survey shows that in spite of the fact that fifteen per cent of our members were forced to reduce acreages, others were able to expand so that the average acreage of the half of our members classed as small operators increased from 12.8 acres in 1942 to 13.3 acres in 1943, and that the average acreage of the members classed as extensive operators increased from 117.8 in 1942 to 121.5 in 1943. It is likely that acreage reductions shown in truck crops by governmental figures were due to the forced restriction of acreages of less energetic gardeners who operated smaller acreages. Incidentally, the average size of all gardening enterprises in the United States is in the neighborhood of 17 acres.

Potential manpower sources were fully discussed at our Pittsburgh Conference last year. At that time it was indicated that high school children, if assigned a variety of tasks with a full knowledge of their limitations and need for motivation, are our greatest source of help. At some jobs these children are even more efficient than older help. Other sources of help include conscientious objectors, Japanese who are, incidentally, American citizens, German prisoners (formerly also Italian prisoners), Mexicans, Jamaicans, and seasonal help transferred from place to place in the United States. I am pleased to report that I helped locate one group of university girls on vegetable and fruit farms in northern Ohio, and that the reports which I received indicated that these girls did an excellent job.

I would not be true to our cause if I failed to report that many tons of vegetables were wasted at our terminal markets because of enforced holidays by organized labor. These vegetables don't get to market if somebody on the farm takes a holiday during the growing season, and when they get to market they soon rot if somebody at that end decides to take a holiday.

The Price Roll Back

The most important problem facing agriculture now is the attempt by selfish interests to deprive agriculture of a living income. When farmers are on the verge of making enough to buy a few home conveniences, when they begin to realize a fraction of the income of their city cousins, the mayor of our largest city or politicians who have done most of that which is necessary to bankrupt our country cry

that if prices of agricultural products are not rolled back his city and their (ours as well) government will go bankrupt. National commentators say without one iota of proof that if subsidies are defeated, it will bring on inflation and cost the American public billions of dollars. If our government goes bankrupt or if inflation comes it won't be because of the defeat of subsidies, but because of the failure of our government to pay its debts when it was in a position to do so. Subsidies merely postpone the ultimate payment from the present when our consumers are able to pay to a time when they will be less able to pay. Subsidies, therefore, create rather than prevent inflationary tendencies.

In 1942 the income from agriculture per person on farms was \$389. This fabulous sum included all income, i.e., cash income, government payments, value of home consumption, rental value of dwellings (average value of \$1135), etc. The city dweller during 1942 received an income per person of \$1014, or over two and one-half times as much as the people living on the farms. The average value of the home in which the city cousin lived was \$4778. Even if our farmers received all of the hypothetical \$14,000,000,000 (which one of our commentators said the defeat of subsidies would cost) plus their regular income, they still would be getting less than their city cousins by some \$60 per year.

The O. P. A.

Much to my surprise our survey indicated that our members were more concerned about securing packages and equipment, especially small tools, than in O.P.A. ceilings.

Your association has been represented at numerous O.P.A. meetings and has presented statements which prove beyond doubt that the vegetable gardening business is hazardous, that costs of production vary from section to section, and from season to season, and with a multitude of different cultural practices. I believe I am safe in concluding from the survey just completed that our membership feels that the O.P.A. program must be simplified or die a natural death because of its very complexity and resultant unenforceability. They feel that one retail ceiling is adequate; with restrictions for percentage mark-ups by middlemen; that floors should be established wherever ceilings are established and that ceilings must be flexible in order to compensate for the hazards of vegetable production. If ceilings are placed on one vegetable they should be placed on all vegetables.

In general, gardeners should be allowed to choose the vegetable which they are best fitted to grow, and less distinction should be given to so-called essential and less essential vegetables. Moreover, if ceilings are imposed, it is necessary to affix ceilings to seed, pack-

ages, and other supplies, equipment and labor which constitute the cost of production.

Supplies

Our survey indicates that the lack of equipment is fast becoming the bottleneck in vegetable production. The need for small tools and packages is especially acute. With manpower shortage, the need for labor-saving machinery is felt all the more. Actually, we should utilize more machinery during the emergency than at any prior time. The War Production Board recognizes this need.

Fertilizers, with the exception of potash, will be more abundant in 1944 than in 1943.

Other Supplies. There has been some complaint that it was not possible to secure adequate gasoline, tires, trucks, etc. These materials are all critical materials, and we all should conserve them to the utmost. To do so saves these critical materials and is money in our own pocket. There need be no fear but what ample supply will be available for the transportation of all the food produced.

Other Complaints. Two growers stated that the curtailment of extension services and increasing regulatory activities assigned to our extension agents is already bringing about a reduction in yields. This growing tendency is a real threat. We should lose no time in convey-

We've gone "All Out"

To Safeguard Your Profits

TOMATO SEED



ALL LEADING VARIETIES

Penna. State Certified

Over 30 years Experience Breeding and
Growing Better Tomato Seed

"The HOUSE OF GLICK"

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HOLMES SEEDS

Are for the Critical
Market Grower
who desires to get
pure, high yielding
strains."

●
Holmes Seed Co.
Canton, Ohio

ing our fears of this threat to our congressmen. Through the efforts of our extension agents, the level of living on American farms, low as it is, is, nevertheless, much higher than that of similar groups in foreign countries.

World Activities

No industry can afford to disregard international affairs under the present set-up. Our survey indicates that the vegetable growers of this country are against subsidizing, by subterfuge or otherwise, one industry in the United States at the expense of another. They are, however, in favor of protecting American industries and agriculture against competition from foreign countries, where the competition is made possible by the low wage scale and low standards of living.

The people in the United States, in spite of some nutritional deficiencies, are by far the best fed people in the world. In North America, where 18.9 per cent of the world's food is produced, we have only 6.6 per cent of the world's population or a 3:1 food ratio. In Europe, where 37.6 per cent of the food is produced for 18.6 per cent of the population, they have a 2:1 food ratio. In Asia 17.2 per cent of the food is distributed among 53.2 per cent of the world's population, giving them a food ratio of 1:3.

It would seem that we should share some of our food if we can do so without creating illusions of grandeur which we cannot maintain, thus wrecking the good will established by the initial splurges. Neither do we want to force our advice, even though well meant, when the advice is not wanted. Cows in India are one-tenth as efficient as those in our country. However, the cow is a sacred animal in India, not to be made into an economic machine. Our ancestors came to this country to obtain freedom of worship. It certainly would be ironical if we attempted to wrest this freedom from the peoples of foreign countries in the belief that we were doing them a good turn. A long-time educational plan may be of some value in this connection.

LANCASTER BONE FERTILIZER CO. Inc.

Quarryville, Pa.

Manufacturers of "Conestoga Brand" fertilizers

Made in Pennsylvania for Pennsylvania soils.

Applying Fertilizer to Vegetable Crops

JESSE M. HUFFINGTON

Twenty demonstrations in Pennsylvania in 1943 show that generally unfavorable results occur where the total fertilizer application is plowed down. The best results were obtained, as a rule, from combined applications along the row and drilled deeply or plowed down in single bands in the furrow bottom. Good results were obtained when up to one-half the fertilizer, or up to 500 pounds per acre, were applied, 2 to 3 inches from the row and the same depth, for cabbage and tomatoes, and 200 to 400 pounds alongside the row, 2 to 3 inches deep, for beans, sweet corn and peas, with the rest drilled 3 to 4 inches deep or in single bands in the bottom of the furrow. Spreading fertilizer over the soil before plowing is likely to result in loss from blowing, erosion if rain occurs before plowing, and, to a certain degree, "fixation" or reversion to a form unavailable to plants. This "fixation" process is less effective in coarse sandy soils, where sufficient lime has been applied, where a large amount of organic matter is supplied from manure and well-rotted sods and cover crops, or following several years of liberal applications of complete fertilizer. Some growers applied a part of the fertilizer with a grain drill, preferably a disc drill, in bands just below the surface before plowing in order to lighten the labor load required by drilling after plowing. It seems that this method actually may result in the "Hi-Lo" placement which is reported to be most effective in various 1943 experiments.

Growers have definite ideas as to the requirements for equipment being designed to apply fertilizer behind the plow. The hopper should be large enough to avoid frequent fillings, and not so high above the plow beam that lifting the fertilizer is difficult. The feeding mechanism should be adjusted to predict fairly accurately the rate applied per acre, with a cut-off arrangement to prevent loss of fertilizer at the ends of the field. Spouts must be properly adjusted to prevent damage from debris.

Where the fertilizer was plowed down alone for bush snap beans on Penn loam soil the result was larger plants, more pods of better quality and larger size as compared to plants receiving a row application alone, but the row application gave earlier maturity.

The addition of 200 pounds of 4-16-4 per acre in the plow furrow to 200 pounds in the row gave an increase of 1100 pounds of sweet corn per acre, in one instance, on Hagerstown loam soil.

Fertilizer drilled 4 inches deep in a really well prepared and deep seedbed produced 400 pounds more canning peas ($\frac{1}{3}$ th increase) than where the same amount of fertilizer (500 pounds of 4-16-4 per acre)

Don't Wait— You May be Late!

BUY YOUR FERTILIZER NOW

HERE ARE THE FACTS: Fertilizers must start to move to farms early this month and continue to move steadily throughout the season. This is the only way the greatest fertilizer demand in history can be supplied, with a war shortage of labor and transportation.

To make certain you obtain the fertilizers you need to grow Victory Crops, we urge you to place your order NOW! Take your fertilizers as soon as you can get them and store them under shelter in a dry place. Farmers who delay too long in placing their orders may find themselves waiting for fertilizer when they are ready to plant their seed.

Under war conditions, the fertilizer industry simply cannot get a lot of extra labor and a lot of extra box-cars and trucks to fill a lot of last-minute orders. Too many late orders may even result in a shortage of fertilizers.

You can help us to make sure you and our other V-C customers are well-supplied with V-C Fertilizers, by placing your order NOW! See your V-C Agent today! Tell him you want your V-C Fertilizers IN TIME to start your Victory Crops ON TIME!

Early orders will enable us to make the best possible use of available labor and transportation in providing you with all the V-C Fertilizers you need to grow Victory Crops—crops that mean profit for you and Victory for Uncle Sam.

VIRGINIA-CAROLINA CHEMICAL CORPORATION

RICHMOND, VA. • Norfolk, Va. • Greensboro, N.C. • Wilmington, N.C.
Columbia, S.C. • Atlanta, Ga. • Savannah, Ga. • Montgomery, Ala.
Birmingham, Ala. • Jackson, Miss. • Memphis, Tenn. • Shreveport, La.
Orlando, Fla. • E. St. Louis, Ill. • Baltimore, Md. • Carteret, N.J. • Cincinnati, O.



was placed in the plow furrow. This was in fertile Hagerstown loam soil. In this same field an additional 200 pounds of fertilizer per acre (a total of 700 pounds) gave an increase of 1380 pounds of peas per acre. Another demonstration, on this same soil type, showed a slight advantage from drilling the fertilizer after plowing, while one on Penn loam soil gave a light increase from fertilizer plowed down. Where the plants were badly diseased on another Penn loam soil much superior vine growth occurred where the fertilizer was plowed down.

It appears that in many instances fertilizer for peas is not drilled deeply enough and that seed germination and early growth are damaged by coming in too close contact with fertilizer.

Another demonstration was with tomatoes on Susquehanna river bottom loam soil of fair fertility with a light application of manure. Here there was a marked stepping up in growth from no fertilizer to 1,000 pounds per acre, drilled and row, and still larger vine growth and better fruit coverage with a larger set of tomatoes, where the same amount was applied in the furrow bottom and along the row.

ROBSON NEW YORK CERTIFIED

Golden Cross Hybrid Sweet Corn

Cornell 29-3 Hybrid Field Corn

Cornell 34-53 Hybrid Corn

Cornell 595 Wheat

Yorkwin Wheat

Wong Barley

WHOLESALE and RETAIL

Catalog on Request

ROBSON SEED FARMS

Box P — Hall, N. Y.

Fertilizers For Vegetable Crops, 1944

CROP	—MEDIUM LOAM SOILS—		
	Manure or Clover Sod	No Manure or Clover Sod	SANDY LOAM SOILS
Asparagus	1000 lbs. 5-10-10	1500 lbs. 5-10-10	2000 lbs. 5-10-10
Beets, Carrots	1000 lbs. 5-10-10	1500 lbs. 5-10-10	2000 lbs. 5-10-10
Beans, Snap, Edible Soy	500 lbs. 4-12-4 or 3-12-6	750 lbs. 4-12-4 or 5-10-5 or 4-12-8	1000 lbs. 5-10-10
Beans, Lima	750 lbs. 4-12-4	1000 lbs. 3-12-6 or 4-12-8	1250 lbs. 4-12-8 or 5-10-10
Cucumbers, Muskmelon, Pumpkin, Squash	750 lbs. 4-12-4	1000 lbs. 3-12-6 or 4-12-8	1250 lbs. 4-12-8 or 5-10-10
Cabbage, Broccoli, Cauliflower	750 lbs. 3-12-6 or 4-12-4	1000 lbs. 3-12-6 or 4-12-8	1250 lbs. 4-12-8 or 5-10-10
Corn, Sweet	200-400 lbs. 0-20-0 or 3-12-6	400-600 lbs. 3-12-6 or 4-12-8	600-800 lbs. 3-12-6 or 4-12-8
Celery, Leaf Lettuce, Spinach	1000 lbs. 5-10-5	1500 lbs. 5-10-5	2000 lbs. 5-10-5
Lettuce, Head	1000 lbs. 3-12-6	1500 lbs. 3-12-6 or 4-12-8	2000 lbs. 5-10-10
Onions	1200 lbs. 3-12-6	1500 lbs. 4-12-8	2000 lbs. 4-12-8
Peas	500-750 lbs.	750-1000 lbs. 3-12-6 or 4-12-4	1000-1200 lbs. 4-12-4, 3-12-6 or 4-12-8
Potatoes, Sweet	800 lbs. 3-9-12	1000 lbs. 3-9-12	1200 lbs. 3-9-12
Tomatoes	800 lbs. 4-12-4 or 3-12-6	1000 lbs. 3-12-6 or 4-12-8	1500 lbs. 5-10-10

This information was prepared by J. M. Huffington of The Pennsylvania State College, Division of Agricultural Extension. The 3-12-6, suggested particularly for peas and sweet corn, is a substitute for 4-16-4, which is not available at present.

Sweet Corn Variety and Strain Trials, 1943

M. L. ODLAND*

Data, obtained from a study of eighty-one plots of sweet corn grown at The Pennsylvania State College in 1943, have been compiled and published. Included in the trials were hybrids as well as many strains of open pollinated varieties. One of the objects of the trial was to bring together in an orderly way a description of the more important varieties and hybrids as well as to evaluate new and promising hybrids and varieties in comparison with old standards.

Of interest is a new hybrid named Sugar and Gold which is exceptionally sweet and tender. It is in the same season as Spancross (sixty-one days in this test), the ears are rather small with 8 to 10 rows and the kernels are a mixture of yellow and white. This hybrid might be tried for a first early planting in home gardens. North Star, in the same maturity class, and Gold Rush Hybrid which is a week later, also looked good in the trials. The former appeared to be a good yielding 8 to 12 rowed early yellow corn while the latter is somewhat later and larger.

In the second early group Carmelcross, Early Golden and Sencross were rated high. Also good were Lee and Lincoln, maturing ahead of Goldencross Bantam. Seed of Goldencross Bantam was obtained from six different sources. A variation in ear size and number of rows per ear was noted, as well as some variation in yield. However, in every case very satisfactory performance was obtained.

Aristogreen, an 85 day, 12 to 16 rowed corn, that was a runner-up in the All-America Selections, performed satisfactorily in the trials, although rated somewhat low in quality.

Narrow Grain Evergreen-Illinois, in the 87 day season was rated very high. It is a good-sized 14 to 18 rowed white corn.

Mention or comment will not be made on other promising varieties or hybrids inasmuch as the complete report is ready for release and in it those who are interested may find considerable information relative to season of maturity, size of ear, number of rows of kernels, uniformity, quality, disease and insect resistance, yield, etc.

Machinery, tools, irrigation equipment and other supplies should be repaired, and missing parts ordered to save both dollars and days on 1944 food crops. Contact your dealer and ration board now for new equipment, if needed.

* Dr. Odland is Assistant Professor of Vegetable Gardening Research at The Pennsylvania State College.

Vegetable Varieties for Pennsylvania*

Jesse M. Huffington

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Asparagus Mary Washington	Large, green with purple tips. Use only large, fresh, 1-year-old roots.	2-3 yrs.	CFGM
Beans, Snap GREEN ROUND PODS, BUSH Tendergreen, Keystonian, Asgrow Stringless Green-pod	Smooth, nearly straight pods; excellent quality.	50	CFGM
Giant Stringless Green-pod (Burpee, Landreth) Stringless Black Valentine	Slightly curved pods; productive; very good quality. Smooth, oval pods, for shipping. Pick young pods to avoid fiber.	50 48	CFGM F?M
GREEN FLAT PODS, BUSH Bountiful, Plentiful WAX ROUND PODS, BUSH Brittle Wax	Stringless, slightly fibrous. Slightly curved, stringless, fiberless pods.	47 50	M CFGM
Pencil Pod Black Wax	Slightly curved, stringless, fiberless pods; seeds black.	50	GM
WAX FLAT PODS, BUSH Sure Crop or Yellow Bountiful	Thick-flat, brittle, very little fiber; seeds black.	50	M
GREEN ROUND PODS, POLE Morse Pole 191, Kentucky Wonder Pioneer 174 (new), Blue Lake, White Creaseback	Slightly stringy, brittle, curved, thick pods. Stringless, fleshy, tender pods. Not productive in all seasons.	70 75	G CFG
GREEN FLAT PODS, POLE Lazy Wife	Slightly stringy, fleshy, fibrous.	75	G
WAX ROUND PODS, POLE Kentucky Wonder Wax	Slightly stringy, meaty, fibrous.	70	G
WAX FLAT PODS, POLE Golden Cluster Wax	Stringless, tender pods.	75	G
Beans, Bush Lima Fordhook Early Fordhook (new) Early Baby Fordhook Green Seeded Henderson	Large potato type; pods 1x4 in. Med. potato type; pods $\frac{1}{2}$ x3 in. Sm. potato type; pods $\frac{1}{2}$ x2 $\frac{1}{2}$ in. Sm. greenish seed; pods. $\frac{1}{2}$ x2 $\frac{1}{2}$.	75 70 70 65	CFGM CDFGM CDF CDF?

(1) The length of maturity will vary with the season and the strain of seed so that these figures are given merely to indicate relative season of different varieties of the same vegetable. Figures refer to days from planting to first harvest unless otherwise indicated.

(2) Symbols indicate: C—canning, D—drying, F—freezing, G—home garden, and M—market garden. A question mark (?) indicates lack of definite information.

* This information is to be published in leaflet form by the Division of Agricultural Extension, The Pennsylvania State College.

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Beans, Pole Lima Leviathan	Large, flat, whitish seed; 1 $\frac{1}{4}$ x5 in. pods.	80	CFG
Challenger	Large, plump, greenish seed; 1 $\frac{1}{4}$ x4 in. pods.	85	CFG
Ideal, Giant Podded	Large, greenish seed; pods 1 $\frac{1}{4}$ x6 in.	90	CFGM
Beans, Green Shell, Bush French Horticultural	Large speckled seed.	65	G
Beans, Green Shell, Pole Horticultural, Cranberry White Dutch Runner	Large, pinkish-buff seed. Large, white beans.	75 70	G G
Beans, Dry Shell, Bush Robust Navy Pea White Marrow (Perry st.) White Kidney California Red Kidney Yelloweye	Very small, white seed. Large, white seed, for baking. Lg. white, kidney shaped seed. Lg., red, kidney shaped seed. Medium, white, yellow eye.	55 55 55 55 55	DG DG DG DG DG
Soybeans, Edible Giant Green, Mendota Bansei, Hokkaido Toku, Jogun, Chusei Emperor, Aoda, Funk's Delicious	Large, green; cool areas only. Lge., green beans; productive. Medium-small beans; baking. Lge., green seed (green, shell stage); long season required.	80- 90 90-100 85- 95 100-120	CFG CFG CDG CFG
Beet Crosby Egyptian, Early Wonder Detroit Dark Red	Oval; for bunching; strains vary as to shape, size and tops. Globe; main crop; Ferry str., short top.	45 50	M CGM
Green Top, Long Season	Large, half-long; edible green tops.	60	G
Broccoli Early Green Sprouting	Bluish-green flower buds.	70	CFGM
Brussels Sprouts Long Island Half Dwarf	Grown as late cabbage for small heads.	100	GM
Cabbage DOMESTIC ROUND Golden Acre (Reg. & Yellows Resistant Strains) Green Acre Copenhagen Market Racine Market Glory of Enkhuizen Marion Market	Earliest round head; 2 $\frac{1}{2}$ -3 lbs. Holds green color well; 3-3 $\frac{1}{2}$. For market or kraut; 3 $\frac{1}{2}$ -4 lbs. Yellows resistant; 3 $\frac{1}{2}$ -4 lbs. Used mostly for kraut; 5-6 lbs. Yellows resistant; 5-6 lbs.	65 70 75 75 80 80	GM GM GM GM GM CGM

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
DANISH BALLHEAD			
Penn State, Roundh'd, Quaker Hill, Reed, Harris, Oakview, Robson, G.L.F.	Suitable for commercial dehydration; medium to large heads; short stems; good for storage and used partly for kraut. 4-5 lbs.	95	GM
Ferry Hollander	Deep, compact heads; good storage; 3 lbs.	90	GM
Wisconsin Ballhead	Yellows resistant Hollander; 3-4 lbs.; lacks uniformity.	90	G
SAVOY			
Early Perfection, Chieftan	Dark green, crisp leaves; 4-5 lbs.	90	GM
RED			
Early Round Red	Golden Acre type; red leaves.	75	GM
Red Rock	Danish type; red leaves.	95	GM
CHINESE CABBAGE			
Chihli	Narrow head; sow seed middle of July.	75	GM
Carrots			
Red Core Chantenay	Deeply colored; cut-off type; 2x5 in.	65	CDFGM
Long Chantenay, Supreme Half Long, Special Danvers	Tapered; for bunching; 1 $\frac{1}{2}$ x6 in.	75	M
Tendersweet, Perfection, Bunching, Imperator	Mostly tapered; bunching; smoother and straighter in deep, mellow soils; 1 $\frac{1}{2}$ x7 in.	75	M
Touchon, Nantes, Coreless	Cylindrical, blunt end, crisp; 1 $\frac{1}{2}$ x5 in.	65	GM
Cauliflower			
Super Snowball, "A"	Main crop.	70	M
Holland Erfurt, "X"	Late; good leaf protection.	80	M
Purple	Greenish purple heads; delicate flavor.	85	G
Celery			
Golden Plume, Wonderful Full Heart, Sweet Heart, Epicure	Full heart, good shipper. Pale green, short, full heart.	115	M
Easy Blanching, Newark Market	Tall, green, ribbed, full heart; dependable production.	120	GM
Summer Pascal (Penn.)	Smooth, crisp, large, green stalks; excellent quality; best for local market and home use.	125	GM
Emperor, Fordhook, Houser	Coarsely ribbed, green; excellent quality.	130	GM
Utah Jumbo, Salt Lake Giant Smooth Prague	Deeply ribbed, green; shipping. Turnip rooted or Celery.	130	M?
Giant Smooth Prague	Turnip rooted or Celery.	100	GM
Chard, Swiss			
Fordhook Giant	Dark green leaf, large rib.	60	CFG

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Corn, Sweet, Yellow Hybrids (3)			
Spencross	Small ear; very short stalk; fair quality.	65	G?M?
Marcross (Earligold, North Star, Burpee cross)	Thick, short ear; good quality; short stalk.	70	GM
Carmelcross, Old Hickory	Slender ear; very good quality; medium stalk.	75	GM
Whipcross, Sencross	Thick ear; good quality; medium-tall stalk.	80	GM
Tendergold	Slender ear; very good quality; medium-tall stalk.	80	CFGM?
Lincoln, Lee	Thick ear; g. quality; tall stalk.	85	M
Goldencross Bantam	Slender ear; excellent quality; medium tall stalk.	90	CDFGM
Ioana	Medium ear; good quality; drought resistant.	90	M
Golden Hybrid, Seneca Giant, Illinois Golden 10	Large, thick ear; fairly good quality; large fodder.	95-100	M
Corn, Sweet, White			
Vanguard, Howling Mob	Thick ear; fairly good quality.	85	M
Early Evergreen	Large ear; good quality.	90	M
Silver Cross Bantam	Slender ear; excellent quality.	90	CGM
Stowell's Evergreen	Large ear; good quality.	95-100	CM
Evergreen Hybrid: 14x5, 14x5xH84, 3x33, Pontiac	Large ears; good quality; uniform maturity.	95-100	CM
Ill. Narrow Grain Evergreen Hybrid (14x13, 14x11)	Large ear; deep kernels; excellent quality; very uniform.	95	CD
Narrow Grain Hybrid 233x227	Large ear; deep kernels; good quality.	95	CD
Cogent, Shoepeg Hybrids	Shoepeg type kernels.	95	C
Little 8 Row	Slender ears; excel. quality.	100	GM?
Corn, Pop			
Hulless, White Rice	Pointed grains.	85-90	G
Golden Queen, Sunburst, South American Yellow	Pearl grains, large ears.	100	GM
Collards			
Georgia	Leaves for greens.	70	G
Cucumbers			
National Ass'n Pickling	Small, for sweet pickles.	55	CGM
Chicago Pickling	Large, for dill pickles.	55	CGM
Black Diamond	Short, dark green; slicing.	60	GM
Straight 8, Colorado	Medium, dark green, smooth.	65	GM
A & C, Ace, Marketeer	Long, dark green, smooth.	70	GM
Dandelion			
Arlington Broad Leaf	Over-wintered, in frames.		GM

(3) New seed of inbred hybrid crosses must be obtained each year to maintain their original vigor, disease-resistance and uniformity.

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Eggplant			
Black Beauty	Oval, midseason, large.	85	GM
N.H. Hybrid, N.Y. Purple	Small, sometimes off-color.	75	GM?
Endive, Escarole			
Broad Leaf Batavian,	Grown in late summer and fall, stored in early winter.	90	GM
Green Curled	Deep Heart Fringed Strain.	90	GM
Kale			
Dwarf Curled Scotch	Grown in late cabbage season, for greens while young and again after freezing in winter.	55	GM
Kohlrabi			
White Vienna	Young, tender enlarged stems	60	GM
Lettuce			
LOOSE LEAF			
Black Seeded Simpson	Loose leaf; all-season.	60	G
Grand Rapids, G.R. No. 1	Outdoors in cool seasons, greenhouse.	60	M
CRISP HEAD			
Cosbie 40	Dark green, sm., hard heads.	70	GM
Great Lakes, Imp. 456	Medium green; large, hard heads; heat resistant.	75	GM
Imperial 847, 44	Dark green, large, hard heads.	80	M
BUTTER HEAD			
White Boston	For local markets; green.	70	M
Crisp as Ice	Brownish leaves; all-season.	70	G
Muskmelon			
Delicious	Lge., early Bender's Surprise.	80	FGM
Bender's Surprise	Large, oblong, very good qual.	85	FGM
Hearts of Gold	Medium size; excellent qual.	90	FGM
Honey Rock, Sugar Rock	Med. size; ex. quality; round.	90	FGM
Pride of Wisconsin	Med.-large; excellent quality.	95	FGM
Aristocrat, Market King	Large, oval, very good qual.	95	FGM
Mustard			
Fordhook Fancy	Deeply fringed, mild, green.	35	G
Okra			
Dwarf Green Early	Dark green, fluted pods.	60	G
Onion Sets			
Ebenezer	Sets less than $\frac{1}{2}$ -inch unlikely to produce seed-stalks.		
Yellow Globe Danvers Bottle	Deep flat; slow seeding; stores well.	95	GM
Southport White Globe Egyptian	Keeps well in storage. Oval; medium mild; stores fairly well. For pickling. Winter topset for early bunch onions. August-April.	100	GM G

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Onion Seeds for Plants			
Utah Valencia, Riverside Sweet Spanish	Large, medium-mild; stores fairly well.	110	GM
Early Yellow Globe	Globe; stores well.	105	GM
Silverskin	For pickling; mild.	100	GM
Bunching	Clusters of thick stems.		M
Parsley			
Paramount	Finely cut leaves; Moss Curled selection.	70	DGM
Hamburg	Edible roots.	90	GM
Parsnip			
Hollow Crown, Model	Long, tapered.	95	GM
Peanuts			
Early Spanish	Planted in warm, light soil.	120	G
Peas			
World's Record	Med.-large, pointed pods; 30-in. vine.	60	FGM
Little Marvel	Small, blunt pods, 15-in. vine.	60	FG
Glacier, Thos. Laxton	Med., blunt pods, 30-in. vine.	58, 60	CFGM
Hundredfold, Laxton's Progress	Lg., pointed pods, 18-in. vine.	65	FGM
Gradus	Lg., pointed pods; 36-in. vine.	65-75	FGM
Teton, Topper, S54	Later Thos. Laxton types; 36-in. vines.	70-75	FGM
Morse Mkt., Gilbo, Stride Alderman, Dark Pod. Tel. Sugarstick	Lg., pointed pods; 36-in. vines. Lge., pointed pods; 60-in. vine. Edible, sickle pods; dwarf and tall strains.	70-75	FGM
Mammoth Podded White Blossom			
Early Sweet, E. Harvest	Edible, flat pods; dwarf and early, tall and late selections. Small, olive green, sweet peas; 30-inch vines.	60	C
Pride, No. 507	Medium-large, olive green, sweet; 24-inch vines.	65, 70	C
Canner King	Medium-large, olive green, sweet; 30-inch vine.	68	C
Early Perfection	Small, olive green, sweet; 36-inch vines; high altitudes.	70	C
Stuart's Perfection	Med.-lge., olive green, sweet; 36-in; high altitudes only.	70	C
Perfected Wales	Lge., olive green, sweet; 48-in.	75	C?
Mammoth Early Canner	Lge., olive green, sweet; 30-in.	60	C?

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Peppers			
Sunnybrook, Squash	Thick flesh, small; productive.	70	G
Early Giant	Medium, bell type, thin wall.	70	M
Jersey Wonder, Harris	Early California Wonder se- lections; thick wall, large, chunky.	80	GM
Wonder, Oakview Won- der, Calwonder	Large, thin to medium wall; productive.	80	M
World Beater, Ruby King,	Med.-large, yellow, heart- shaped.	80	GM
King of the North	Hot types.	75-85	GM
Oshkosh			
Cayenne, Tobasco, Cher- ry, Hungarian Yel. Wax			
Pumpkin-Squash			
Straightneck, Conn. Hyb.	Bush, yellow, warded.	50	GM
White Bush Scallop	Patty pan.	50	GM
Long Cocozelle, Zucchini	Bush green types.	50	GM
Table Queen, Acorn	Sm., acorn shaped, for baking.	75	GM
Buttercup, Warren	Dry, thick flesh; excel. quality.	95	GM
Small Sugar	Fine grained, dry flesh; pies or baking.	100	CGM
Golden Cushaw	Long; fine grained flesh; med- ium moist.	120	CGM
Connecticut Field	Large; coarse flesh.	120	CGM
Golden Delicious, Gold- en Hubbard, Boston	Dry, sweet, medium grained; good keeper. Popular for can- ning.	100	CGM
Marrow			
Vermont Hubbard	Green, warded; dry; good keeper.	100	GM
Blue Hubbard	Large; blue-gray shell.	110	M
Radish			
Scarlet Globe, Cavalier	For greenhouses and outside.	25	GM
Chinese White or Rose,	Sow in August for winter	65	GM
Black Spanish	storage.		
Rhubarb			
Macdonald, Valentine	Deep strawberry color.	2-yr.	GM
Rutabaga			
Bucks Co. Yellow Globe	Early strain; light yel. flesh.	85	GM
Salsify			
Sandwich Island	Long, white, tapered roots.	95	GM
Spinach			
King of Denmark, Nobel	Smooth-leaved; slow seeding.	45	CFG
Long Standing, Blooms- dale, Summer Savoy	Dark green; short stems; savoyed.	45	CFGM
Old Dominion, Va. Savoy	For fall or over-winter.		
New Zealand	Summer; branched.	75	CFG G
Sweet Potato			
Yellow Jersey	Dry; medium yellow.	125	CGM
Maryland Golden	Medium moist; deep yellow.	125	CGM
Porto Rico	Moist; orange-yellow.	125	CGM

Kind and Variety	Description and Suggestions	Days to Mature (1)	Sug- gested Use (2)
Tomato			
Valiant, Break O' Day	Globular; light foliage; lt. red.	65	M?
Stokesdale, Scarlet Dawn	Globular; medium foliage; J. Baer type; med. to deep red.	70	GM
Pritchard, Garden State	Globular; thick wall; solid; deep red; staking.	75	CGM
Marglobe	Globular; firm; solid; medium red.	80	C?GM?
Rutgers	Flattened-globe; large; deep red; green wraps, etc.	80	CGM
Winsall, Oxheart	Pink; large; meaty; mild; ir- regular.	85	G
Jubilee	Orange-yellow; mild; globe.	80	CGM?
Turnip			
Purple Top White Globe	White, sweet and tender.	50	GM
Golden Ball	Round; smooth; deep yellow.	55	GM
Seven Top	Over-wintered for tender, young tops; August-April.		GM?
Watermelon			
Honey Cream	Small; nearly round.	80	G
Early Kansas	Medium; nearly round; red.	85	GM
Dixie Queen	Large; oval; red interior.	85	GM
Klecky's Sweet	Large; cylindrical; sweet, red.	85	GM
Citron (green or red seed)	Used only for preserving.	90	CG

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In the past 12 years of the All-American Trials
3 Gold Medals, 8 Silver Medals, 8 Bronze Medals
have been awarded to

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ASSOCIATED SEED GROWERS INC., MILFORD, CONN.

All-America Vegetable Varieties Announced

JESSE M. HUFFINGTON

All-America vegetable judges recently announced new variety award winners and their recommendations for 1944 introduction.

Great Lakes lettuce won top place. This crisphead type is similar to Imperial 456. It stands the heat and sun better than most Iceberg or New York strains, is slow to throw a seed head, and very resistant to tip burn. It also does well in cool weather. A limited amount of seed is available and growers should try to obtain the most uniform strain available by ordering early. The color is somewhat lighter than Imperial 44. This entry won a bronze medal.

Another bronze medal went to cucumber Cubit, which is a temporary name given to entry No. 21. This is a dark green, white spine, cylindrical cucumber with round ends. It makes an ideal slicing and shipping sort, with firm, white flesh and handsome appearance which are retained for a long time after picking. It is comparable with Colorado, A and C, and Straight 8, seems to make better and more fruits for early picking, and seems a more prolific bearer. Home gardeners, market gardeners, and shippers may all grow this variety to advantage.

Keystonian Greenpod, a bush snap bean of excellent flavor and dependable production, won honorable mention. It is comparable with Tendergreen in quality and Burpee Stringless in dependable production. It is round, meaty, straight, slightly longer than Tendergreen and the Improved Burpee Stringless.

These three award winners are the only ones with sufficient seed for introduction in 1944. Other popular entries were Georgia Improved Perfection pepper recommended to replace the popular Perfection Pimiento, Manatee Wonder pepper similar to Early Calwonder or Oakview Wonder, Dwarf Horticultural bean named Brilliant, and hybrid sweet corn Aristogreen.

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Rochester 11, N. Y.

Report of the Vegetable Committee

Goals Conference

U. S. D. A. State War Board, Harrisburg, Pa.

October 21 and 22, 1943

1. That the authority for food production, food distribution, and food prices be centralized under one head in order to give the growers and processors more confidence and have less confusion. This centralized authority to be extended to States so that local and State problems can be settled without delay.
2. The committee recommends a simplified price ceiling and a floor price based on cost of production. These prices must be adequate to stimulate maximum production.
3. The committee recommends that crops contracted for processing be placed under the direction of the Food Distribution Administration to control their flow into the processing channels.
4. As to price: The committee recommends that the State War Board Chairman call a meeting during the month of November comprised of representative growers and representative processors to determine the price support and ceilings necessary to secure maximum production.



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Hybrid Sweet Corn

Peas — Beans

Cucumber

Beet — Carrot

Radish

TAPPERSON SEED CO.

ALLEN TOWN, PA.

Vegetable Gardening Extension Activities, 1943
The Pennsylvania State College

Home Gardens

Farm gardens	160,750
Urban and suburbs at homes	470,250
Plot or community	369,000
Number of gardens	1,000,000
Average size of gardens—3,750 square feet.	
Total acreage—86,550 acres.	
Average value per garden—\$65.	
Total value of gardens—\$65,000,000.	
Specific assistance given to 30,796 individuals.	
Number of meetings—1,110.	
Attendance at meetings—67,645.	
Publications distributed—250,000.	

4-H Clubs

	1943	1942
Number of clubs	213	132
Membership	3,575	2,063
Club meetings	838	573
Attendance	17,369	10,159
Roundups	142	114
Attendance	4,188	2,145

Canning Crops

	1943	1942	Increase
Tomatoes	30,000 A.	28,500 A.	1,500 A.
Peas	17,900	15,300	2,600
Corn	17,100	14,700	2,400
Beans	4,400	3,700	700
 	69,400	62,200	7,200

General

Total number of meetings—2,244.
Attendance at meetings—89,465.
News articles prepared by specialists—85.
Radio talks prepared—78.

Specialists

W. B. Nissley, Jesse M. Huffington, G. J. Stout.

Two Important December Reminders

W. B. NISSLEY

Seed

Some folks remember that last year choice varieties were sold out by our co-ops and larger seedsmen months before planting time. The wise thing to do is to order seed as soon as possible after the catalogues are mailed. Some growers of specialty crops have ordered their supply already. Those who have left-over seed from 1943 should store it properly for next year. Proper storage is also important for new seed after you receive it.

To store seed dry it well and store in tight containers in a cool, dry place. A cool place is considered slightly more important than low humidity. Storing in a warm place with high humidity is wrong. Cabbage seed is very short, especially Danish strains, about one-third of normal.

Fertilizer

Secure your fertilizer needs for 1944 early to help the labor, transportation and storage problems.

The availability of nitrogen has improved since last year and many analyses now contain more nitrogen. The supply of potash has been reduced however. There is about 20 per cent less potash available this year and the amount has been reduced in some analyses.

Growers who have storage facilities for fertilizer can help the industry greatly by ordering their needs now. In doing this the fertilizer manufacturers can use their limited man power steadily, the transportation problem will not be congested in the spring of the year and by moving the freshly mixed goods on to the consumer their limited storage space can be used for more ingredients for mixing.

A survey shows that the labor factor has become so serious in a few instances that farmers had to offer their services to fertilizer plants in order to get out the goods. Truck transportation is growing less each month rather than better due to a serious shortage of truck tires and trucks wearing out. Rail transportation may take too long for early spring delivery unless ordered early which means now. During the past few years the price of fertilizer has not increased greatly when compared with the price increase in vegetables, especially when sold retail or semi-wholesale. In the light of this situation it seems to be good business not to skimp on fertilizer when fertilizer is relatively cheap and vegetables high. The return per dollar invested in fertilizer should be very satisfactory. On the farm, fertilizer should be stored in a dry building and the bags may be placed on racks made by laying boards, with air spaces between them, on 2 x 4's.

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**Be thankful and start every day with the feeling that it is the
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are that it will be.**

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**End of
Volume**