

Historic, Archive Document

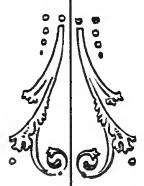
Do not assume content reflects current scientific knowledge, policies, or practices.

62.11

7418 200
1921
1922

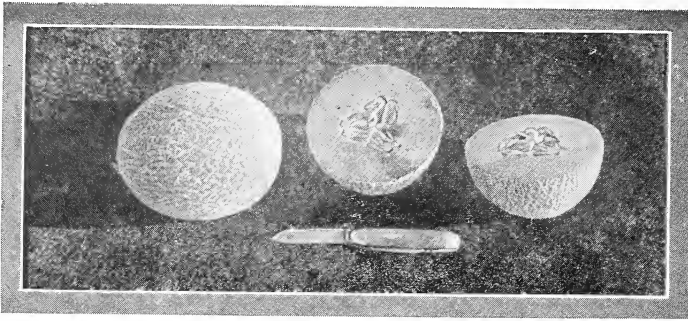
Announcement
About
TEN TWENTY-FIVE
Cantaloupe
Seed

1921
1922
PRICE
LIST



And Culture Information
**THE ROCKY FORD CANTALOUPE
SEED BREEDERS ASSOCIATION**

ROCKY FORD, COLORADO



Announcement

About Ten Twenty-Five Cantaloupe Seed

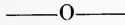
As the original propagators of this strain of cantaloupe seed we feel justly proud that it has reached the distinction of excellence that has placed it as **FIRST CHOICE** in the estimate of every cantaloupe grower who is familiar with its qualities. It has the dignity of **quality**, in unvarying uniformity of **netting**, **size**, and **external attractiveness**; it **responds to the soil** and **climatic conditions** from Florida to California, and its **excellent marketability** has established it as the **UNIVERSAL** variety that is grown in the great cantaloupe growing districts, such as the Imperial Valley.

We have persistently endeavored to maintain the highest quality possible in this strain, by the most painstaking methods of innumerable selections individually tested out, we have thus, added plus qualities to this strain each year.

In spite of the depressing economic conditions prevailing we have had unexpected and unprecedented demands for our Ten-Twenty-Five strain of seed, and we regret exceedingly that our supply, of forty thousand pounds that we had last September, is entirely exhausted, and we are unable to fill many orders that we would very much like to supply, but can not do so this season.

Like the first harbingers of spring, the demands for seed seem to promise a confident summers' harvest. We can only assure our customers now, that we expect to grow the **BEST** stock of seed this coming year that it has ever been our privilege to produce; for we have qualities infused into our "stock seed" which we believe will warrant such a statement. Our latest development in cantaloupe seed possesses **ideal internal qualities** which merits for it a better name than merely an identifying number. We plan to call our latest strain "Ne Plus Ultra" which means nothing more beyond.

DESCRIPTION OF VARIETIES.



As a matter of history, the foundation stock of every desirable strain of "Netted Gem" or "Rocky Ford" type of cantaloupe in use today was originally of the "Rust-resistant Pollock" variety. From that splendid stock of seed we have developed three pure line-selected thoroughbred strains of cantaloupes and two distinct valuable hybrid strains.

Our first step was the development of that famous strain known as, **SALMON-TINTED POLLOCK NO. 25**. This strain was remarkable for its improved uniformity, in size, form and netting and its attractive salmon tinted color of flesh; the excellent marketing qualities of this strain at once made it a popular favorite. Simultaneously with it, we also developed the **GREEN-MEATED POLLOCK NO. 25**, which was practically identical except for its emerald flesh color, this strain is more popular in some markets, and this strain has seemed to be a little more resistant in some seasons.

Our next step was the fortunate discovery among our many plats, of the wonderful uniformity produced in plat number 1025, which was the start of **OUR TEN-TWENTY-FIVE** strain. The remarkable feature of this strain was its uniformity in the production of 100% market appearance, which caused it to replace all other strains within two years.

Our latest achievement in cantaloupe breeding is the wonderful infusion of combined uniform market appearance, thick solid flesh of exceptional long keeping quality, with exquisite edible features that we have been able to find combined in our new strain which we will name **THE NE PLUS ULTRA CANTALOUPE**, (nothing more beyond). We will be able to offer this strain in the fall of 1922 if we are successful with our crop of seed, which we feel reasonably sure that we will be.

— 0 —
EARLY HYBRID NO. 2
— 0 —

Originating from a cross between the Pollock and Early Watter's strain of cantaloupes, this has proven to be one of the most desirable early strains of cantaloupes. It combines the early production with the close netting of the two parent strains, and has shown considerable disease resistance from the Pollock side.

— 0 —
GOLDEN POLLOCK
— 0 —

Originating from a cross between the Pollock and Burrell Gem strains of cantaloupes. This combines the deep orange flesh of the later, and the close netting of the Pollock. It has much stronger more disease resistant vines than the Burrell Gem parent; it is a popular melon with many of our customers.

— 0 —
HONEY DEW CANTALOUPE
— 0 —

This ivory white type of winter cantaloupe has become a standard type of cantaloupe for some sections and markets. It has a very thick solid flesh of exceptional long keeping quality, under favorable conditions can be kept two months in prime condition; the flavor when properly matured is exquisitely sweet, quite similar to cantaloupe, and for out of season periods for other cantaloupes, it has proven to be a profitable cantaloupe to market, after one has had some experience in handling it.

THE ROCKY FORD CANTALOUPE SEED BREEDERS ASSOCIATION

PRICE QUOTATIONS

—O—

CANTALOUPE

—O—

Salmon Tinted Pollock No. 25	- - -	Supply of seed exhausted.
Ten-Twenty-Five Pollock	- - -	Supply of seed exhausted.
The Ne Plus Ultra Cantaloupe	- - -	Not offered for sale yet.
Early Hybrid No. 2	- - - - -	15c per oz., \$1.50 per lb.
Green Meat Pollock No. 25	- - - - -	15c per oz., \$1.50 per lb.
Early Watters	- - - - -	15c per oz., \$1.50 per lb.
Golden Pollock	- - - - -	-15c per oz., \$1.50 per lb.
Honey Dew Cantaloupe	- - - - -	15c per oz., \$1.50 per lb.
Burrell Gem or "Ordway Pink Meat"	- - - - -	15c per oz., \$1.50 per lb.

—O—

CUCUMBERS

—O—

Early Fortune	- - - - -	10c per oz., \$1.00 per lb.
Earliest of All	- - - - -	10c per oz., \$1.00 per lb.
Improved White Spine	- - - - -	10c per oz., \$1.00 per lb.

—O—

Address all orders to Secretary,

Rocky Ford Cantaloupe Seed Breeder's Association.

P. K. BLINN, President

CLEM V. RYAN, Treasurer

JAMES B. RYAN, Secretary



CONDITIONS AND CULTURAL CARE

PHILO K. BLINN, B. S.

—O—

CLIMATE

—O—

The cantaloupe seems to thrive in rather a wide range of soil and climatic conditions, being grown to some extent in almost all of the states, although from the standpoint of money returns, the area of very successful cantaloupe culture is somewhat limited, yet it appears that it is more the question of cultural care, disease and insect pests, or favorable marketing facilities which determine the success of the industry in a given locality, rather than the specific soil or climatic conditions.

Climatic conditions within certain limits are essential to successful cantaloupe culture, and the consideration of this topic may answer many questions as to the adaptability of some sections for melon growing. First, there should be a **long, hot summer**, with about five months free from killing frosts, with a daily maximum temperature between 80 and 95 degrees during June, July and August, with a night temperature seldom falling below 60 degrees; four months may mature good cantaloupes, but with so short a season, frost would probably cut short the profits of the crop, unless, as is done in some of the northern states having too short season, the plants are started under frames in sods or paperbands; Second, there should be plenty of bright sunshine, without excessive rainfalls; this will secure good quality and lessen the liability to the attacks of fungus troubles, that are so often fatal to the melon crop in rainy sections.

—O—

SOIL AND FERTILITY

—O—

It is conceded by all experienced cantaloupe growers, that the cantaloupe thrives best in a warm, sandy loam; clay loam and other types of soil may produce a good crop if the tilth and fertility are good, but heavy soils are apt to be cold and backward, causing lateness in maturing, and it is also generally believed that the nature of some types of soils seriously influences the form, size and other qualities of the cantaloupe. It is true, however, that the average size will vary in different seasons; in seasons of very favorable growth the cantaloupes will run to a large proportion of "jumbo melons" (larger than standard) in seasons less favorable, there will be more small or pony sizes. An actual test of a crop on a piece of land, is the **best** proof of the fitness of the soil for that crop; for while a chemical analysis may theoretically seem favorable, in practice it may prove otherwise.

There are many factors that may influence the results; but in general the land that will grow other vine crops, such as cucumbers, pumpkins and squash, will probably grow good cantaloupes.

Soil for cantaloupes should have good drainage both surface and sub-soil, and in irrigated regions the land must have a uniform slope or grade so that the water will run even, without soaking or flooding the hills; if there is one point above another in cantaloupe culture that needs special emphasis, it is the caution against **oversoaking** or **flooding** of the surface of

the field; this will be further discussed under the topic "Irrigation," but the point must be held in mind in many of the operations, and in selecting the field, to have it well drained on the surface as well as the subsoil.

If no detrimental soil conditions, like seepage or alkali, exist, the question of fertility is usually the most important one in relation to the soil; barnyard manure is an old standby, and cantaloupes of all crops, will respond as well to well-rotted-compost better than any form of commercial fertilizer, but experience of the most convincing sort has shown that soil cannot be made to produce good cantaloupes indefinitely, year after year, by applying manure and artificial fertilizers.

Aside from fertility there are also the questions of plant diseases, soil bacteria and unbalanced food supply. **Crop-rotation** has proven to be the most practical and adequate means of preserving not only the proper fertility, but the nearest approach to securing uninfested soil conditions, hence, crop rotation becomes an important phase of cantaloupe culture.

Alfalfa, to the western ranches occupies the same place that clover does to the eastern farmer, or the cow pea to the southern planter; these crops for their respective sections, provide ideal soil fertility and tilth for the cantaloupe. In Colorado alfalfa sod is the ideal soil preparation for cantaloupes, and a comparison of the results on alfalfa sod with even well manured old land will convince the most skeptical. Experience has demonstrated that early matured cantaloupes can hardly be expected on soil following a heavy fertility consuming crop, like sugar beets or corn, a good **late crop** being the usual result. Nearly all the fine records of early yields and high prices have been made on soil that was in a perfect state of tilth and fertility.

PREPARING LAND FOR CANTALOUPE

The secret of getting soil in that ashy, mellow condition so desirable for cantaloupes, is one largely of experience, for handling soil in the same manner on different farms will seldom get the same results; one may be a clay, the other a sandy loam. The texture and the previous cropping has much to do with the way soil can be handled. In general, there must be moisture in the soil during the winter to secure the mellowing effect of the frost, and the soil **must not** be handled too wet. If clay or adobe "packs," it will dry hard and lumpy; real sandy soil can be handled wet with less risks than other soils. The soil should be friable so that the harrow will pulverize it without clogging as it does in mud, and yet not so dry as to leave the field full of clods.

Before plowing, the soil should be well disked for two reasons. First, to thoroughly mix the soil with any fertilizer previously applied, and second, to pulverize the soil on the surface, so that after the work of preparation is complete, the bottom of the furrow will be as finely prepared as the top. Plowing for cantaloupes is usually made to the depth of five to six inches; in the arid region the plowed land must be closely harrowed behind the plow, to prevent too rapid drying of the surface, and should be closed up by fine-

ing the soil on top; this is usually accomplished with the steel harrow with the teeth turned nearly flat, or with a float or land leveler, a fine dust mulch will check evaporation, and thus conserve the soil moisture, to enable a more thorough harrowing to complete the preparation. Preparing the land some time before planting is advisable as the soil becomes settled, and the seed will germinate more readily and a more uniform stand will be secured. The soil should also be harrowed after **cold spring rains**, to check evaporation, which will tend to aid in warming up the soil. Before laying out the rows to plant, while the surface of the soil is dry, the field should be carefully leveled with a land leveler; removing all high points and filling the hollows and dead furrows, so that in irrigating the water will run uniformly without flooding the rows, or oversoaking any of the hills.



PLANTING AND SECURING A STAND



The first requisite in planting cantaloupes, is to have the weather **warm**, for warmth and moisture are the two essentials in seed germination. Many growers make the mistake of planting while the ground is yet cold with freezing temperature occurring every few nights. If perchance the days are warm enough to germinate the seed, the plants are stunted and make a slow, tantalizing growth, should they be so fortunate as to escape these late frosts of spring.

As a general rule, a few days before the latest freeze may be expected, is as early as it is safe to plant. At Rocky Ford, May 1st marks the usual date for the latest frost, but even then there are risks to run, as killing frosts have occurred as late as the tenth of May, or even later. It is **common** for cantaloupes planted as early as the tenth of May to begin to ripen as soon as the earlier planted seed, so as a rule it is not to much advantage to plant very early; the **grower** must be the judge in regard to his soil and climate.

There are two systems of planting cantaloupes—the **drill-row** and in hills. In the hill system, the field is check-rowed like corn, to permit cultivating in each direction, the rows usually being laid off five to six feet apart, and the hills about the same distance in the rows. By dropping eight to ten seed to the hill, it will require about a pound of seed to plant an acre. It is advisable to plant plenty of seed in order to secure a good stand, allowing for the attacks of the cutworms and other destructive agencies.

There are two methods of planting cantaloupes in hills—with a hoe, and with a hand planter, commonly called a “snapper.” The rotary type of this form of planter is usually the most satisfactory, but some modifications are usually necessary to fit it for dropping cantaloupe seed.

By filling the holes of one of the regular corn dropping plates with lead, then by boring out with a three-eighths drill bit and by testing and enlarging

the holes it can be regulated to drop quite well; the seed box will also need close fitting, to prevent the thin flat seed from leaking out. A block or stop should be attached to the blades at about the depth to plant, about one and a half inches, this will insure uniform depth, which is essential. Great care should be exercised to have the depression or hole formed in the soil by the thrust of the planter, filled or leveled with the foot; otherwise the seed will dry out, field mice will more readily find the hills, and a hard dash of rain will form a hard chunk, or crust right over the seed. The surface of the soil should be **dry** to insure good work with the planter. A man with some experience can plant from three to five acres per day with a planter, while one acre per day is about all that can be accomplished with a hoe.

In the drill system the rows are usually put about the same distance apart, but the seeds are sown in drill rows, the seed being dropped every two or three inches; this method requires about two to three pounds of seed per acre. The seed is sown either with a hand drill, the horse planter or the sugar beet drill as used in the Rocky Ford district. The important point is to get the seed dropped uniformly, and the drill set to plant at a uniform depth,—not over one and a half inches; as soon as the plants are nicely up they should be thinned to single plants, far enough apart to permit hoeing between. After the danger from insect injuries is over, and about the time the first blossoms appear, the plants should be thinned again to one plant very two feet, on the average; the tendency at this point is to leave the plants too thick, especially if the plants are extra fine. The most advanced plants are selected, which is the cause of the drilled fields usually maturing earlier than the hill planted, and the earlier development usually compensates for the extra cost of the increased amount of seed, and the added labor of thinning.

The essential points in planting are to get the seed planted at a uniform depth, and at a uniform distance from the irrigation furrow; to have the soil fine and firmed just right, to skilfully conserve and apply moisture, and to keep a crust from interfering with the young seedlings.

—O—

IRRIGATION

—O—

The moisture problem in cantaloupe growing is a very important one. Some times in the humid sections, there is too much water, and it becomes the question of how to save the crop, but little can be said here, except to select well drained fields for the cantaloupes and provide the field with furrows, like the irrigation furrow, to carry off the excess rain water, and to plant on somewhat raised hills or ridges.

In the arid sections the moisture for the crop as a rule depends on the irrigation furrow, and the skill of the grower to so manipulate the soil and water. Too many look upon irrigation as a simple process of running water through the rows, or over the ground, paying little or no attention to the **needs or demands**, or the dangers of flooding or oversoaking the land. When soil is completely saturated with water, the air is practically all driven out

THE ROCKY FORD CANTALOUPE SEED BREEDERS ASSOCIATION

and the soil settles, which defeats the very object and purpose of plowing and the other work of soil preparation, which will dry hard and nothing but frost can ever mellow it as before.

The application of water to all such crops as cantaloupes should be by sub-irrigation, that is, the moisture should soak through the soil to the plant or seed, from the irrigation furrow, without the surface of the soil, except in the furrows coming in contact with the water; this is essential, not only for the needs of the plants, but also the same amount of water will serve a longer time the needs of the plants. The water rights in some ditches makes it necessary to conserve the moisture as long as possible.

In order to supply the moisture uniformly to the seed along the row, the seed must have been planted at a uniform distance from the water line, about four to six inches. To insure uniformity in the soaking of the rows, the rows should be "logged" out, or smoothed out with a short piece of log about the size of the furrow; this will cause the water to run through quickly, and by regulating the amount in each row, the rows will become uniformly wet without flooding or soaking the ground.

The idea is to soak the rows until the water has fully reached the seed, while the surface over the hill remains nearly dry; **this is ideal condition** for germination and is sufficient for the needs of the plants in all the early irrigations. Later the rows can be soaked till moisture shows on the surface back of the plants.

Under Colorado conditions, one irrigation, after planting, and one again about the time the plants are coming up, is ordinarily all that is required until after the first cultivation, after that irrigation and cultivation alternate each other every week or ten days, the exact number of times depending on the weather and soil conditions.

The amount of irrigation necessary to secure the best results in cantaloupe culture is subject to so many varying factors, that it is impossible to lay down an exact rule. In the first place, the cantaloupe does not thrive in a wet soil, as evidenced by the injury and poor quality of the crop in seasons of excessive rain. The needs of the crop in the first stages are very small, and as light watering as possible to secure the needed moisture, is best; then as the plant develops the amount of irrigation should be increased, **light, frequent irrigations**, rather than heavy soakings at long intervals having proven to be the best plan.

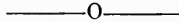
When the vines are nearly grown and set full of developing fruit a heavier irrigation is then needed by the plant, but as soon as the fruit have reached their growth, light waterings should again be the rule; to insure the best quality, little if any irrigation should be applied during the picking

THE ROCKY FORD CANTALOUPE SEED BREEDERS ASSOCIATION

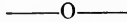
season, just enough to prevent severe wilting; it is at this time that the cantaloupe "rust" fungus makes its appearance, and moisture and dews are favorable to its development.

The dryer the season, the better the quality in cantaloupes, is an axiom that should induce more careful irrigation among cantaloupe growers in the irrigated sections.

An excess of water in hot weather is apt to induce a heavy growth of vine at the expense of early "sets" due to the rank growth, and such succulent growth is also much more liable to succumb to the attack of diseases and insect pests.

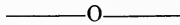


HOEING

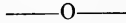


Hoeing the hills is of great importance, but it should be done with skill both as to the time and in the manner it is done, for careless hoeing is a common error; if the seed has been properly planted in mellow soil and the irrigation properly applied, there is no reason for deep hoeing in and close to the hill, as it only disturbs the plant and dries out the soil; weeds can be destroyed by rather shallow hoeing.

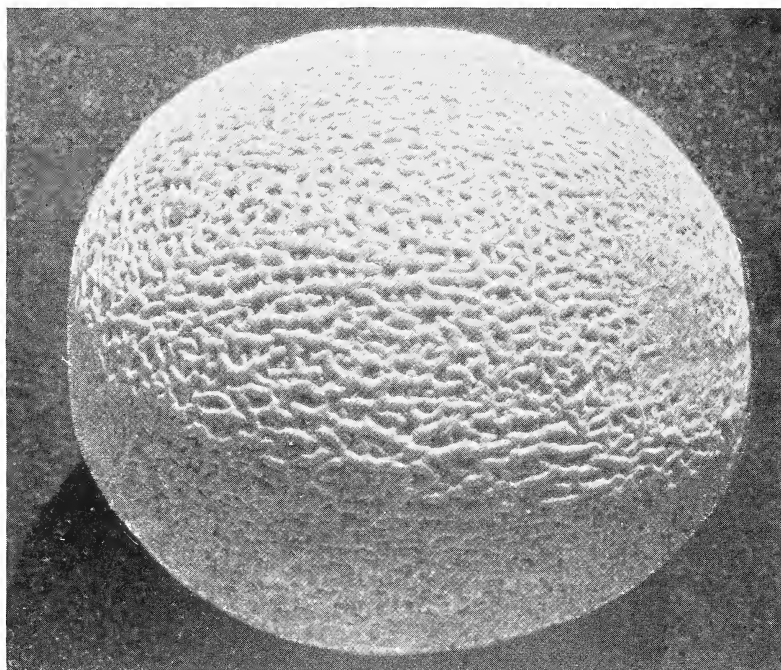
The dry, cloddy soil on the surface of the hill, should be removed and replaced with fine mellow soil drawn up from away from the hill, hilling up the plants as much as possible, even to almost covering the two seed leaves. This will protect the plants from wind, and insects to a large measure; but the most important feature of this process is the holding of the moisture well upon the stems, affording the best condition for a long base for the development of the roots, as well as supplying the plant with moisture. If on the other hand, the soil in the hill is loosened up with the hoe and not hilled up by drawing the loosened soil to the plant with the hoe, the hill will usually dry out, and only a short portion of the stem be in moist soil to induce root development.



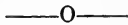
CULTIVATION



A thorough preparation of the soil before it is planted to cantaloupes will very much lessen the necessity for so much cultivation afterwards, but a good deal depends on frequent and thorough tillage during the early stages of the growth of cantaloupes. At first it should be deep and thorough, but not close enough to disturb the plants; the cultivations should be more shallow and further from the hills as the plants develop. The grower who cultivates deep and close to the hill because the vines do not prevent this, is cutting off roots, setting back his crop more than he is doing good. He should understand the growth of the roots, for they form the counterpart of the vines on the surface, only they ramify the soil more thoroughly and to a greater distance than the length of the vines, so it is easily possible to damage the crop by careless cultivation. Examinations in the soil between the rows will reveal the tiny rootlets very thick, four to five inches deep hence surface tillage after the vines start should be the rule.



GENERAL CARE OF THE CROP



If there is a secret in getting early cantaloupes, it is in growing them from start to finish in such a way that the growth is not checked at any time.

The seeding period is the critical time in the development of a crop of cantaloupes, for it is at this stage that the check in growth usually occurs, from cold weather, high winds, lack of moisture or the attacks of insects.

A knowledge of the manner of growth of the root system and development of the seedling, will in a measure explain the reasons for the steps taken and the precautions that are necessary at this time in handling the crop through this important period.

The root system that first develops when the seed germinates, penetrates almost directly down from the seed while the stem or radical is pushing its way to the surface. These little roots seem to form a temporary support for the plant during the first two or three weeks, for up to this time the stem from the seed point to the top of the ground is smooth and white, with no evidence of the lateral roots.

The second root system develops from the stem about the time the fifth leaf appears, or four to five weeks after germination; these roots seem to form the main feeders of the plant, for the growth of the plant is almost insignificant until it feels the impulse of this larger and better root system. The question of good early growth and maturity almost hinges on the success of the farmer in supplying the conditions that will favor the early and proper development of this lateral, or main root system. It seems evident that the depth of planting and the manner of managing the soil in the hill has an important relation to the early development of these lateral roots. Experience teaches that seed planted much over two inches in depth are slow and difficult to germinate, being weakened by the long stem that is necessary to reach the surface, and on the other hand, if planting is too shallow, the seeds are apt to dry out, or if rain follows a crust will form, which must be removed, and that often exposes the seeds that are not planted at a sufficient depth, with fatal results, or leaves the plant with too shallow a stem support; it is then whipped and wrung by the high, drying winds or exposed to the attacks of the cucumber beetle.

Seed will germinate readily when weather conditions are favorable, if planted at about the depth of one and one-half inches.

When the seed leaves are nearly to the surface, the hills should be raked off, removing any crust or dry lumps which may obstruct the little melon plant. Plenty of seed should be used to provide against a loss in handling the hills, or from the attacks of insects. It also affords a chance to select the thriftiest individual plants when the thinning is done. Owing to the injuries from the striped cucumber beetle, the thinning should be delayed until the plants have about the fifth leaf, when the beetle will not

do much more injury. The extra plants in the hill should be destroyed by pinching or cutting off the stems, as pulling them out may disturb the plants to be left.

INSECT ENEMIES

We will discuss this subject from the growers' standpoint simply mentioning the methods that have proven to be the most successful under Colorado conditions. Crop rotation also, is often a good way of avoiding infested fields, in fact, "prevention is better than cure," in fighting insects and plant diseases.

The destruction of insect-harbors, such as weeds, old vines and plants, should be given more consideration, and the cultivation of the fields in the late fall, winter and early spring, will destroy many eggs and insects that pass the winter in the soil,—grasshoppers and cutworms for instance.

THE STRIPED CUCUMBER BEETLE

This little black and yellow striped beetle, about a quarter of an inch long, is doubtless one of the most common melon pests, especially when the plants are young and in the two-leaf stage; long lists of remedies have been tried, but the best that experienced entomologists have to suggest is to spray the little plants as soon as possible with arsenate of lead, at about the usual three-pounds-to-the-fifty gallon formula.

The beetles are not killed by this remedy but it acts as an efficient repellent. Spraying with the Bordeaux mixture is also recommended, but the Bordeaux is better for the little black flea-beetle when they bother, as they do at times, but they usually work more on the cabbage, radish and turnip. The best means of applying sprays to small plants is the small type of sprayer that can be easily carried over the field, the type that has an air chamber in which pressure is pumped in, and that has a cut-off on the nozzle that works like a trigger, thus allowing the hills to be sprayed with little waste of the material. A very good spray pump of this type is The Brown Auto Spray No. 1, manufactured by The E. C. Brown Co., Rochester, N. Y.

Dusting the hills with air slacked lime, through a common cheese cloth sack is an old means of fighting the beetles but is not as effective as the arsenate of lead spray.

THE MELON APHIS

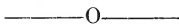
The melon aphis is doubtless the most serious pest that the cantaloupe has to contend against in many places, and one against which resistance is least effectual where conditions are favorable to the aphis.

Spraying with "Blackleaf 40," one ounce to ten gallons of water, with a little soap, say seven ounces, is the most effective spray where a few hills become infested, but where the whole field becomes infested, spraying has proven useless.

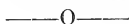
The introduction of the natural enemies, like the lady-beetle has been tried in California with some promise, but this plan is in an experimental

stage as yet. The necessity of supplying the enemy as soon as the aphid appears, makes this plan rather impractical for the grower.

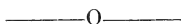
Destroying the winter harbor or host plant of the melon-aphid would seem to be the best measure to adopt if possible; this winter harbor has not fully been determined for some points.



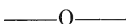
THE PICKLE WORM



We have received many complaints from growers in the Southern part of the United States of injuries from this worm; we have made careful inquiry to find the best information on this pest, but we are sorry that there is no known remedy as yet, other than the general precautions of clean farming, rotation of crops and fall plowing; in the more northern melon districts, the attacks of this insect are apt to be only periodical, which is true with nearly all insects, as they appear in waves; one year they may be very destructive and the next season will hardly be seen, so, there is no need of giving up because there have been insect pests one year. The eggs of the larvae of the pickle worm are deposited on the buds and tender shoots of the plants and as the young worm hatches, it feeds in the angles of the stems and leaves, and if the plants were well sprayed with arsenate of lead, the first broods would be largely held in check, and subsequent sprays might be profitable.

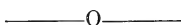


PLANT DISEASES

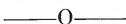


Crop rotation, seed selection, or breeding for disease resistance offer the best means of controlling plant diseases; the spraying of the crop with Bordeaux mixture or other fungicides is about the only other means at hand. In Colorado, spraying has not proven as successful as it is reported to be in other states, doubtless due to different climatic conditions.

Careful control of irrigation seems to offer one means of lessening the attacks of some of the fungus troubles in the arid sections under irrigation.

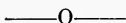


HARVESTING



After all injuries to the crop have been explained and remedial measures suggested, there still remains one great cause of poor returns from the cantaloupe crop, viz., **careless and unscrupulous methods of marketing.** When cantaloupes are scarce and sales are quick, there seems to be no power on earth that will stay the hand of the average grower as he pushes his crop onto the market, with the encouragement of advices from his progressive (?) commission merchant; together they have produced a glutted market with inferior products. Instead of protecting the markets with a quality that would increase consumption, they simply let it fill up with everything and anything, and neither the grower nor the consumer is benefited. It is common for growers to admit that they are shipping cantaloupes that are not fit to be eaten, and it is not strange that a similar complaint comes from the consumer. Not till the grower is honest with himself, should he expect good returns.

PICKING

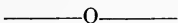


When green or over-ripe melons are allowed to go onto the markets, the trouble usually is in the picking; careless or mistaken ideas often prevailing. There is a very narrow limit in the stage of ripeness that a cantaloupe can be picked and have it in the right condition for distant markets. On one hand, it can not be picked so green as a tomato or lemon, and still ripen during shipment to fair quality, nor, on the other hand, can it be allowed to show any distinct color of ripeness, like an apple, without it becomes too soft on long shipments.

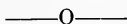
It should be ripe enough so the flesh will be sweet when cut open, yet too hard to be eaten for a day or two; it requires skill and experience to determine the proper stage.

Jocularly, it has been said, "The cantaloupe has three stages in three days,—green, ripe and rotten." This expresses the fact that there is a very short period for marketing the crop in good condition, yet if picked at the proper stage, handled right, under refrigeration it can be shipped to distant markets in quite normal condition.

It is hard to describe to a novice, just how to detect the right stage to pick a cantaloupe; there is first, a very slight change of color in the interstices of the netting, hardly enough, however, to attract the attention of the inexperienced; second, it is tried with a pressure of the thumb or forefinger, when it should "slip," that is, separate in the same manner as when real ripe; but requiring some little force but not enough to break the stem or flesh out. Conditions of the vines, and climate will at times vary the picker's judgement to some extent; but by cutting occasionally a melon the point can be decided. It is **very essential** that pickers be **carefully instructed**, and **closely watched**, for the good returns should not be expected from green or over-ripe cantaloupes.



PACKING AND CRATING



The fruit should be carefully handled, not bruised, or roughly shaken to loosen the seed in the cavity, they should be hurried to the shade and crated as soon as possible; the cantaloupes should be carefully graded before crating, not only as to size, but for condition of ripeness; for there will always be some a little too ripe which must not be crated with the green-ripes, or the markets will suffer. In grading, the ripe melons can often be marketed in local or nearby markets, and the ones just right reserved for the long distance shipments.

In crating the layers must be uniform, and tight, but not so crowded as to crush or bruise the flesh, yet there should not be a loose melon in the crate if it is expected to carry well.

In crating, the ends of the crate should be supported on the crating table, so that the slats can spring down in the center of the crate, then when the crate is finished and nailed up there will be no spring of the slats to loosen the pack when the crate is picked up.

