## Paulsen Nursery

##  <br> - MAR 41957 .

U. S. D Chas. Paulsen, Prop.

Minden, Nebraska
Phone 288-J

Located 2 Blocks East of the Water Tower Just East of the Swimming Pool

1957


## Greenhouse

In August, 1949, we bought the Hansen Greenhouse and Floral Shop. We have installed an air circulating gas heating unit, 85,000 B.T.U. which has ultra modern thermostatic control. It gives us an opportunity to study plant growth every day in the year and see blossoms every day. We have many varieties of plants and will be adding more as we get the room.

## Location

Our Nursery is located 3 blocks east of the C. B. \& Q. Depot and just east of the American Legion Swimming Pool; or 3 blocks east of the Courthouse Square and 4 blocks north. It is one block south of Highway 6.

About six acres are set apart for the home and the growing of nursery stock, perennials, and other plants. We have about forty varieties of shade trees. A few of these are dwarf varieties and can be planted for specimen trees or hedge trees. Some of the large varieties are spreading, others are tall and narrow. They have many colors in the spring and fall and a few are colored in summer. All of them bloom, but the blossoms on some are so small that they are hardly noticeable. Others are a mass of flowers when they bloom.

We also grow annual flowers, cabbage, and tomato plants and flower seeds.

Below are the names of garden plants that we grow for our customers.

Cabbage -
Copenhagen Market Cauliflower -

Early Snowball
Celery - Cornell No. 19, self bleaching
Egg Plant -
Two varieties
Kale
Lettuce -
Great Lakes
Onion -
Sweet Spanish
Yellow Bermuda
Asters
Snapdragons
Columbine
Petunias
Pansies
Ageratum
Hybrid tomatoes will sell at $\$ 1.20$ per dozen.
Most of the other plants will sell at 35c, 50c, or 60 c a dozen.

## Frost Proof Planting of Tomatoes

I use a 16 -inch tile spade and slant it so the point will be 3 or 4 inches deep in the ground when the blade is in the ground about one foot and place in it a tomato plant 12 or 14 inches tall. Just let the tip stick out. Step on the ground above it so it will have firm contact. If frost comes and freezes the top rake some of the dirt off from the stem and it will leaf out again. The Hybrid Big Tomato was reported to have withstood about 2 or $21 / 2$ degrees of frost in 1953.

Plant Labels, Fertilizers, Etc.
Plant Labels, White Plastic ..... 2 for 5 c
Plant Markers ..... 2 for 5 c
Plant Stakes, Wood ..... 12 for 10c
Vermiculite ..... qt. 10c
Peat Moss ..... qt. 10c
Peat Moss, Plastic Bag ..... 20c
Peat Moss, One-Bushel Sacks ..... about $\$ 3.00$
Vermiculite, Four-Bushels Bags ..... 3.00
Organic Fertilizer, 100 lbs. ..... 5.50
Melorganite or Thrive
Superthrive Rootstarter ..... 39
Hyponex ..... 25

Large Assortment of
W. ATLEE BURPEE COMPANY Flower Seeds and Garden Seeds

## Landscape Service and Tree Planting

We can generally arrange for this on a few days notice.

## Roses

Many of these tearoses are semi-hardy and tender in our climate. Planting the graft three or four inches deeper generally prevents them from freezing too bad. In winter most of them freeze close to the ground, but some of them freeze below the ground and still come up to bloom.

They require a sunny place and plenty of water. If the ground contains manure, watch out for white grubworms.

We recommend peat moss as fertilizer for roses.

Dusting sulphur is safely used for most rose bugs and copper sulphate for ground disease such as fungus.

We have many roses that are not listed.
Hansa, large hardy \$ 1.25
F. J. Grootendorst, perpetual blooming------- 1.25

Red Roses
Red Radiance
Red Talisman

## Multi-Colored

## Talisman

President Hoover

## Roses (Continued)

Pink Roses
Editor McFarland Pink Radiance
Yellow Roses
Golden Dawn
Sunburst
White Roses
Caledonia
K. A. Victoria
Each $\$ 1.00$
These are hardy roses and patented roses at ------------------1.25 to $\$ 1.50$
Charlotte Armstrong, Peace ------ $\$ 1.50$ to $\$ 2.50$
Mirandy ------------------------------1.50 to $\$ 2.50$


## Dahlias

These tubers are easily grown providing they get plenty of water and sun.

Name - Classification







Virginia Towell-Lavender, medium ---------- . 35
Watchung Giant-Amber yellow ----------------.-. . 40

We have large Yellow and Pink Dahlias.
Price - 25 c to $\$ 1.00$

## Peonies

Peony, Officinali Rubra Pelna, each ..... $\$ 1.50$
(This is the earliest known double flowering peony and is scarce.)

Many Pink Varieties, each50
White Varieties, each ..... 1.00
Red Varieties, each ..... 1.00
Yellow or Partly Yellow Varieties, each ..... 1.50

We sell Divisions with three to five eyes each.
Peonies need to be divided every eight or ten years and need lots of water in the spring and fall. Watering in summer seems unnecessary.

## Bulbs

Regal Lilies, each ..... \$ .25
Tuberous rooted Begonias ..... 25
Tulips-Double Red ..... 10 for 1.00
Russian Lilies, each ..... 25
Dahlias, 30 varieties ..... 25 to 1.00
Cannas ..... 2 for . 25
Glads ..... 25 for 1.00
Tiger Lily

$\qquad$
25 c each, or 5 for 1.00
Star of Bethlehem ..... 12 for .50
Grape Hyacinth ..... 12 for . 50
Chionodoxa Luciliae or Glory of the Snow ..... 100 for 2.50

## Gladiolus

Gladioli are by far the most popular garden flower. They grow in either poor or good soil and bloom vigorously providing they get plenty of water. We have over fifty varieties not mentioning our nice ruffled ones. First planting should be about May 1, and continue planting every two weeks until about July 10 for continuous blooming. The latest plantings will bloom just before frost.

Some of our customers buy hundreds of them, others just buy a few of the newer varieties.
Mixed Varieties-large
Mixed Varieties-medium
SPECIAL-4 for 25 c or

American Express
Beacon-Scarlet, white throat
Burma-Deep ruffled, rose red
Buckeye-Beautiful bronze
Elizabeth the Queen-Ruffled, lavender
Gianis-Ruffled, rose salmon
Joe Wagner
King Lear-Maroon ruffled lavender
Maid of Orleans-Cream white
Margaret Fulton-Coral pink
Pandora-Soft geranium pink
President Eisenhower
Purple Supreme
Rosa Van Lima-Early, rose pink
Snow Princess-Best white
White Gold
Cream White

## Chrysanthemums

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## CUSHION MUMS

Bronze-2 in., Early, $1^{11 / 2}$ feet
Copper-2 in., Early, $1^{1 / 1 / 4}$ feet
Pink-2 in., Early, 1 foot
Red-2 in., Early, 1 foot
White-2 in., Early, 1 foot
Yellow-2 in., Early, 1 foot
Plant and water each week until buds form, then twice a week. Pinch bud when about 9 inches high so that plant will spread out except for cushion mums which do so without pinching.

Plants sent mail order about May 1st, $10 \%$ extra.
Chrysanthemums, each -------------------------------1.- . 25
5 Mums, your choice--------------------------------1.00
12 Mums, our choice (all different) .------------ 2.00

## Perennials

Alyssum
Aquilegia (Columbine) ..... 35 to .50
Azaleas Molis ..... 75
Bleeding Heart ..... 50 to .75
Baby Breath (2 varieties) ..... 50 to 1.00
Blue Flax
$\qquad$
Buttercups (2 varieties) ..... 25 to .35
Chrysanthemums ..... See List
Creeping Phlox ..... 75
Candytuft ..... 35
Coral Bell ..... 50
Carnation ..... 50
Daisies-Shasta ..... 4 for 1.00
Daisies-English ..... 25
Delphinium ..... 25 to .75
Dianthus ..... 25 to .50
Gaillardia ..... 25
Gypsophilia-Double ..... 35 to 1.00
Golden Glow ..... 35
Iris ..... 10 to .50
Lupines ..... 50
Lily-of-the-Valley ..... 12 for 1.00
Lythrum ..... 50
Oriental Poppy ..... 25
Phlox (4 varieties) ..... 3 for 1.00
Platycodon ..... 50
Pyrethrum ..... 25 to .50
Peonies ..... 50 to 1.50
Ribbon Grass ..... 25
Statice .....  50
Sweet William ..... 25
Sweet Peas-Hardy ..... 6 for 1.00
Spiderwort ..... 35
Tritoma, Red Hot Poker Plant .....  50
Violets ..... 15 to .35
Violas .....  20
Weigela ..... 75
Pea Blue Indigo Plant .....  50

## More Favorable Conditions For Fruit Growing

Up to the present time, summer time has presented us with two problems; namely, dry ground and dry air.

Irrigation was the answer to dry ground, where available. Where not available, cultivation and mulch were partial answers.

Since the Republican River has been dammed, we are getting more moisture in the air, as the lake behind the dam gets filled up. This moisture in the air will increase considerably, when the wind is in the southwest. The wind will carry considerable moisture northeast for twenty or thirty miles and will at all times be noticeable for about fifty miles. When the wind is straight south, the effect will be felt from the Harlan Lake up to fifty miles north. Instead of that dry, hot southwest wind, we feel the wind many degrees cooler and quite moist for at least twenty-five miles northeast of the Lake.

Since the Tri-County project was put in, I have noted good corn crops from Grand Island to Gothenburg and poorer corn east and west of that area.

Many plants collect moisture from the air through their leaves as well as through their roots.

## Apples and Other Fruit Trees

We sell about 8 varieties of apples, One of these varieties-Whitney Crab-is a carrier of Cedar Rust.

The soil in our country is fine for apples. In some places, the soil may be helped by using one-third of a pound of borax to a tree for boron deficiency. Irrigation is helpful to most varieties when the rainfall is less than thirty-five inches per year. A windbreak on the north often provides a few inches of extra moisture. A windbreak from the southwest will reduce damage from hot winds.

## Anoka Apple

The Anoka apple trees start to bear the second year and produce apples in quantity every year, causing them to be dwarf. These apples are good for pies and canning. The children like them.

Cedar Rust does not bother them. They ripen in August.

## Early Harvest

The well-known harvest apple bears in about six years and bears steadily afterward. Ripens in July.

## Yellow Transparent

This is a good canning apple which ripens in August.

## Stock on Hand and Prices

The prices in this catalog are generally quoted on standard sizes that we have growing. We often have smaller trees or plants that are cheaper. We also have larger trees which are older and larger and for this reason we quote 25 c per foot or $\$ 1.00$ per foot, etc. Most of these trees are moved or root cut every two years. That stunts the tree or shrub but it develops a better root system so that it will move with less shock.

The subsoil in this locality is dry for forty or fifty feet down, but we often have three to seven feet of surface moisture. For this reason transplanted shrubs and trees need an adequate supply of water every few days or weeks depending on the rainfall. Trees should receive enough water so that the soil will be moist two or three feet deep every ten days or two weeks. Shallow rooted plants need water more often but the soil will need to be moist only a few inches or a foot deep. Some may even need watering every day or several times a day if the temperature is high. In cooler weather less watering is necessary.

Nearly all trees, shrubs, and plants make much better growth when proper fertilizer is used. Nearly all plants need nitrogen, phosphates, potash, and lime. Legumes need less nitrogen than other plants that we have tested. Outside of nearly all bulbs, large root crops, or deep rooted plants, and celery; few plants respond to potash. Some plants require much lime; other plants require moderate amounts, but it may injure acid loving plants. As far as I know, all plants, shrubs, and trees respond to phosphate fertilizers.

The University of Nebraska has testing facilities for the four elements just mentioned. However, it sometimes happens that these elements are tied up in the soil so that the plants can not use them. The best test is the simple method of buying a sack of fertilizer and applying and checking the results at harvest time in comparison with untreated crops in the same field. Our garden crops respond to fertilizers containing one or more of a dozen other minor elements.

The Borax Company published a sixteen-page pamphlet on boron, showing that much research has been done but very little use has been made of it since 1942.

Three other elements, iron, copper, and zinc, also benefit quite a number of plants.

Acid loving plants may sometimes respond to salt, sulphur, and aluminum compounds from actual tests here, but very little literature is available on the use of these elements.

Plants will often live for years in deficient soil but grow better if they can get all the necessary food required in available form.


Flowering Crab


Red Bud

## Ornamentals

Witch Hazel ..... $\$ 1.00$
Red Leaf Peach ..... 1.00 to 2.00
Purple Leaf Plum, each ..... 2.00
Betchel's Double Flowering Crab, each ..... 2.00
Hopa Flowering Crab, each ..... 2.00
Snow Ball, each ..... 1.00 to 2.50
Korean Cherries, each ..... 75
Carragana, each ..... 50 to 1.00
Hydrangea, each ..... 1.00
Golden Bell, each ..... 75 to 1.50
Privet, each ..... 15 to .50
Pussy Willow, each ..... 1.00
Orange Quince ..... 75
Buddleia (4 varieties) ..... 50
Bittersweet ..... 1.00 to 2.00
Spirea (6 varieties) ..... 25 to 2.50
Tamarix ..... 1.00
Persimmon, 12 ft . ..... 10.00 to 15.00
Elderberry ..... 75 to 1.50
Mock Orange ..... 1.00
Barberry ..... 25 to 1.00
Cotoneaster .30 to ..... 2.00
Dogwood, red or yellow ..... 1.00 to 2.00
Flowering Almond ..... 75 to 1.00
Pride of Dorchester ..... 2.00
Nine Bark ..... 75
High Bush Cranberry ..... 1.00
Lilacs -
Common ..... 100 @ 5.00
Red ..... 1.00 to 2.00
White ..... 1.00 to 2.00
French Double ..... 1.00 to 2.00
German ..... 1.00
Des Fontaines Double White ..... 1.50 to 2.50
Mdm. LeMoine Double White ----- 1.50 to 2.50
Pres. Loubet Double Purple Red _-1.50 to 2.50
Red Japanese Maple, 1 foot, up $-{ }^{-1.00}$ to 2.0075

## Fruit Trees

APRICOT
Apricot Seedlings
Apricot-Moorepark 1.50
Other apricots are semi-hardy and are sold as such here.

| APPLE |  |  |
| :---: | :---: | :---: |
|  | Each | 5 trees |
| Anoka | \$ 1.75 | \$ 7.00 |
| Early Harvest | 1.75 | 7.00 |
| Delicious Red | 1.75 | 7.00 |
| Duchess Red | 1.75 | 7.00 |
| Yellow Transparent | 1.75 | 7.00 |
| Whitney Crab | 1.75 | 7.00 |
| Apple Trees, 2 in. ca |  | \$ 2.50 |

## 5-N-1 APPLE

This means five different varieties grafted on one tree. Each $\$ 2.50$

| CHERRY - Sour |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Small | Medium | Large |
| Kansas Sweet | \$ 1.75 | \$ 2.00 | \$. 2.25 |
| Montmorency | 1.75 | 2.00 | 2.25 |
| Early Richmond | 1.75 | 2.00 | 2.25 |
| English Morello | 1.75 | 2.00 | 2.25 |

## PEACH TREES

Peach-Elberta
Polly Peach

| PEAR |  |  |
| :---: | :---: | :---: |
|  | Small | Medium |
| Clapp's Favorite | \$ 1.50 | \$ 1.75 |
| Douglas ------ | 1.50 | 1.75 |

## NUT TREES

Northern Grown Seedlings

| Walnut | \$1.00 to $\$ 7.50$ |
| :---: | :---: |
| Pecan | 1.00 per foot |
| Hickory | 1.00 per foot |
| Horse Chestnut-small | 1.00 per foot |


| PLUMS |  |  |
| :---: | :---: | :---: |
|  | Small | Medium |
| Apricot Plum | \$ 1.75 | \$ 2.00 |
| Wauneta | 1.75 | 2.00 |
| Sapa | 1.75 | 2.00 |
| Superior | 1.75 | 2.00 |
| Omaha | 1.75 | 2.00 |
| Quince, large |  |  |

## GRAPES

| cord | 35c each; 3 for \$1.00 |
| :---: | :---: |
| Niagara | 35 c each |
| Warden | 35 c each |

## Number of Trees and Plants per Acre

Varieties; distance apart-number per acre
Apples; $30 \times 30=$ Trees 48
Apricots $20 \times 20=$ Trees 108
Cherries, Sour $18 \times 18=$ Trees 134
Cherries, Sweet $24 \times 24=$ Trees 75
Grapes $8 \times 8=$ Vines 680
Peaches $18 \times 18=$ Trees 134
Pears $26 \times 26=$ Trees 64
Plums $16 \times 16=$ Trees 170
Plums $18 \times 18=$ Trees 134
Blackberries $3 \times 6=$ Bushes 2420
Red Raspberries $3 \times 6=$ Bushes 2420

## SPECIAL BARGAINS

Taxus or Yew, 1 ft . to 2 ft ., ------- $\$ 4.00$ per foot
Small Norway Maples ---------------.-. 75 per foot
Red Maples .-- 2.00 to 4.00
Tulip Trees, 1 ft . to 12 ft ., each .--.... .75 per foot
Thornless Honey Locust, each --. . 50 per foot


Red Oak, 1 ft . to 12 ft . $-\quad . \quad . \quad . \quad . \quad . \quad . \quad$ per foot

Sycamore, 4 ft . to 10 ft . $-\quad-\quad-\quad-\quad 1.00$ per foot

## Wayzata Everbearing Strawberries

## Bush Type - No Runners

Under intensive irrigation we recommend the Wayzata Bush type divisions above all others. It is the favorite of about $99 \%$ of our customers.

The Wayzata is a very large, strong vigorous plant about ten to twelve inches high the second year if it has been well fed and watered. The berries are very large and more uniform than most varieties

The first bloom is generally the largest berry of the eight on the flower stem. Flowers are carried high making it by far the easiest everbearing to pick.

The seeds are so small that they are hardly noticed. The flavor of the Wayzata is mild and sweet. It is excellent for freezing and requires little sugar when canning.

The Wayzata is perfect flowering needing no other variety to pollinate it.

It is bush type because only two or three plants out of a hundred have any runners. Some Wayzata are semi-bush type and sell at a cheaper price as they are propagated from runner stock. These runner plants resemble the Gemzata. We recommend that the plants be set fifteen inches to eighteen inches apart in the row and that the rows be two and one half feet apart.

Plant them a little lower than they grew in the Nursery because the water will wash away the soil between the rows when using intensive irrigation which all everbearing strawberries require.

We prefer irrigation rather than mulch, and irrigate on an average every four days except when
the temperature gets up above 100 degrees, then we irrigate every two days soaking the soil eight to twelve inches deep.

In porous soil watering every two days may be necessary. The Wayzata bears a good crop before July first then it takes a two-weeks rest and then starts to bear steadily until the thermometer reachos as low as 25 degrees above zero. Each picking is heavier than the previous one.

In 1946 from July 15 to November 10, we retailed 1,200 quarts of Wayzata Everbearing strawberries, field run, at 50 c per quart, from one fifth of an acre. At that rate you could expect $\$ 3,000.00$ per acre.

Picking costs were 10 c per quart, boxes $11 / 2 \mathrm{c}$ each.
Phosphates are generally needed at the rate of two to four pounds per 100 square feet, mixed with one ounce of urea for extra yield. These should be mixed and worked into the soil. One fourth to one half pound of nitrogen can be added if the soil needs it.

Occasionally a trace of zinc or copper may increase the yield 5 or $10 \%$.

The plants can be planted in hard or loose ground The advantage of hard ground is that it does not wash as much as the loose ground, and water soaking will generally loosen it.

The Bush Type Wayzata Everbearer is a great labor saver because it is an endless job to keep runners off the runner type strawberries. If the runners are left on, many do nothing but make runners, others start making fair-sized berries but as the runners increase, the berries get smaller and soon get the size of peas.

The Bush Type can be grown three years and then divided or pruned back. In the nursery, we divide every two years and always have large berries. The third year, extra fertilizer will be needed to get big berries, as the plant cannot feed the berries sufficiently. A plant just can't make a lot of runners and produce its best, but if the runners are kept off, most everbearers will produce a fair crop.

| 12 Divisions | 3.00 Postpaid |
| ---: | :--- |
| 25 Divisions | 5.00 Postpaid |
| 50 Divisions | 9.50 |
| 100 Divisions | 18.00 |

## Cultivation of Bush Type Wayzata

The Bush Type Wayzata Strawberry begins to form buds as soon as it starts to grow. These will blossom and form berries which will ripen if the plant gets water when needed. If the growing plant is dry for five or six days, it will shed its flowers and fruit to protect itself. With a few days of proper watering, it will again be blooming and will continue to produce berries if it has sufficient moisture all of the time.

During July the Wayzata will rest for about two weeks, although some of the plants may have a few ripe or green berries on them. After this rest period, they will bear steadily, increasing in quantity as the
plants make more crowns. Plants set early in the spring often have four or five crowns in the fall. Strawberry plants can, however, be set any time during the Summer providing plenty of moisture is made available for them. In white sandy soil one third to one half shade is beneficial to the plants, but in black soil they like full sun.

Strawberry plants generally require shallow hoeing or cultivating as most of their roots are in the upper three inches of soil. We recommend not over one inch deep cultivation near the plant.

The fertilizers generally used for strawberries are small amounts of nitrogen and potash with much more phosphate and lime, except in sandy soil. Many minor elements are also used either as fertilizers, soil conditioners, or grub worm repellers. Perbaps the most important of these is Borax which contains Boron. About twenty pounds of Borax to the acre is recommended for strawberries, apples, pears, cherries, apricots, alfalfa, cabbage, tomatoes, Swiss chard, squash, spinach, radishes, lettuce, kale, eggplants, celery, cauliflower, carrots, Brussels sprouts, and a few other plants. Borax has been found to be toxic to a great many kinds of small grains. Sulphur, arsenate of lead, copper compounds, as well as iron, and zinc often seem to benefit plants, and iodine compounds may give the fruit a better color. We believe that most of these are minor foods or elements, and that much of the soil contains them in suitable quantities. Of course, there are some exceptions.

Strawberries will grow in almost any kind of soil, but better and larger berries can be grown if a few of the needed foods can be provided. Sulphur, lime, and arsenate of lead reduce the number of pests that live in the ground and interfere with the roots of the plants.


Early Spring is generally considered the best time to plant strawberry plants. However, some people prefer to start them in the Fall so the plants can get well established before winter. Strawberry plants do not ship well during June, July, and August; therefore, fall planting should start in September.

In growing everbearing strawberries for market, the runners must be cut off or pulled off every week. This induces the plants to bear flowers and larger berries. This extra labor cost of keeping off the runners soon pays the little extra in the initial cost of buying divisions of the Bush Type Varieties. The labor saved in caring for them is, as you can see, another advantage of growing the Bush Type Plants.

## SOME OF THIS NURSERY STOCK

 is in the ground and will be fresh dug.At The Pioneer village we planted 25 varieties of shade trees. Next summer you can see them in full leaf while visiting there, as well as many perennial flowers and bulbs we grow.

## WHILE WAITING

For your Nursery Stock to be dug and packed, spend some time at the -

## Harold Warp Pioneer Village

> Showing
> Man's Progress from 1830 to 1950
> 10,000 Items In 12 Buildings On 2 City Blocks
> - Including -
> Transportation, Power, Plows, Reapers, Threshers, Fire Equipment, Guns, Clocks, Washers, Music, Lighting, Shops, Homes, etc., - all restored.
> 8 Blocks from the Nursery

## Berry Plants

Berries will sometimes grow without much care, but will grow better if conditions are made favorable.

Moisture and windbreak are very essential.
Moist, fertile soil attracts earthworms which seem to benefit many plants.

I believe our soil is very good but it is often so dry that plants cannot get minerals in soluble forms. Heat, frost, and moisture will often get minerals in soluble form if they are given lots of time.

Pruning may be done in dry weather after the fruit has been picked but many prefer to prune when plants are dormant just before budding in the spring.

If the ground gets hard, common manure will help things grow and make better soil if sufficient water is used. Peat moss and wood ashes, too, are useful.

## Raspberries

Cumberland Black, 6 plants ..... 1.00
Dewberry, 12 plants ..... 1.00
Mulberry, each ..... 1.00
Blackberries
Alfred, 6 plants ..... 1.00
Gooseberries
Hutton, each .....  50
Downing, each .....  50
Currants, Red Lake, each .....  50

Berry plants are all home grown.

## Rhubarb

Canada Red:
No seed stalk, red and very sweet _-. 2 for $\$ 1.00$
MacDonald:
No seed stalk, larger than above .. 3 for 1.00

## Evergreens

Arbor Vitae, 1 to 5 ft . ------------------- $\$ 1.00$ per ft .
Arbor Vitae, Compacta $-\quad 2.00$ per ft.
Pine, Yellow or Ponderosa --.-.-. 1.50 per foot
Pine, White 1.50 per foot
Pine, Mugho, each
Silver Cedar, often called Silver
Beauty -------------------------------------1.50 per ft.

Pathfinder -- 2.50 per ft .
Weir Scopulorum ----------------------3.00 per ft.
Blue Heaven ------------------------- 3.00 per ft.
Irish Juniper, 2 ft . -3.00 each
Yews ----------------------------------------1.00 per ft.

Red Cedar, sheared ..... 1.00 per ft.(Inverted cone shape, 4 to 6 ft .)
Norway Spruce and Black Spruce-.-- 2.00 per ft. (The real Christmas trees)
Douglas Fir -------------------------------2.00 per ft. Colorado Blue Spruce ----- $\$ 2.50$ to $\$ 5.00$ per ft . Grafted Koster Blue Spruce -------- 8.00 per ft.



## Pfitzer Juniper

## Spreaders

Spreaders that are used for foundation plantings are scarce but we have a good supply.

| Sabina Juniper | Width Measure |
| :--- | :--- |
| Pfitzer Juniper |  |
| Hetzi Glauca |  |
| Waukegan Juniper |  |
| Badland Juniper |  |
| Admeribles, not over <br> (Are often used for grave covers) | 2.00 per ft. |

## Mugho Pine



## Shade Trees

Some of these trees are twenty feet high and we have a limited supply of seedlings. Prices vary according to size and shape and are very reasonable.

Our garden crops need windbreak protection as well as good soil and water. Some plants need shade. A home is more comfortable both in summer and in winter if the windbreak and shade are adequate.

A large list of shade trees offers selections suitable for every home. Some are drouth resistant as the cottonless cottonwood and box elder and beautiful in their place.

Ash
$\$ 1.00$ to $\$ 15.00$
Chinese Elm
Cottonwood
Birch, American White, 5 to 6 ft , each $\$ 5.00-\mathrm{up}$
Caragana or Siberian Pea Tree ----------------1.00
Moline Elm, 10 ft .
American Elm, 2 to 3 inches cal.--- 5.00 to 10.00
Hackberry, 6 to 8 ft . -
8 to 10 ft . $\$ 4.50 ; 10$ to 12 ft .----------- 7.50

Redbud ---------------------------------------------1.00 to 5.00
Pin Oak, 1 to 4 ft .--------------------------1.00 per foot
Burr Oak, 1 to 10 ft . -----------------------. 75 per foot

Sugar Maple, 8 ft . to 12 ft ., each
Kentucky Coffee Tree, 6 to 8 ft , each $-\quad 5.00$
Honey Locust Moraine, 5 ft ..-...... 1.00 per foot

Maple-Norway, 3 to $12 \mathrm{ft} .-----\quad .-\quad .-\quad$ per foot
Maple-Common --------------------1.00 to 15.00

Mountain Ash, 6 to $8 \mathrm{ft} .$, each $-\mathbf{-}$
Poplar-Lombardy, 7 ft . and down _-_Up to .60

Poplar-Silver
Poplar-Bolleana, up to 6 ft , per foot $-\ldots-$
Over 6 ft ., per foot

Weeping Willow-Yellow, per foot ----------.-. . 50
Sycamore, 10 to $12 \mathrm{ft} .$, each -15.00
Small size, 3 ft , each

## Broad Leafed Evergreens

Abelia, Grandiflora, Glossy, each--..--........... \$ 1.00
Kahmi Alatifolia, Mountain Laurel, each

Boxwood, small ------------------------------------.-- 4 for 1.00
Pachysandra Terminatis, each --.....-. 25 to . 50
Mahonia Aquifolum, each -------------.-. 2.00 to 3.00
Oregon Grape Holly, each
Euonymus, Radicans Vegetus, Med., each 2.50
Azelia Molus, (Hardy here, but sheds its
leaves) each
Most of these plants need some peat moss.

## Hedge Plants

Privet, per 100 ..... $\$ 10.00$ to $\$ 20.00$
Cotoneaster ..... 50
Gnilla Maple, each ..... 10 to 2.00
Barberry ..... 25 to 2.00
Pussy Willow
Poplar-Lombardy, 5 ft . to 6 ft .60
Poplar-Bolleana, 15 c per ft .; large 20c per ft.15.00
Lilac-Double, each ..... 2.00 and up
Vines
Trumpet Vine
Climbing Rambler Bittersweet
Engelmann's Creeper Silver Lace Vine Wisteria

## Cuttings for Planting

$$
\$ 1.00 \text { per } 100
$$

Lombardy Poplar Cuttings can often grow without irrigation, but under irrigation they can grow seven feet tall in one year. If you wish to grow them without irrigation, summer fallowed soil is by far the most satisfactory.

With experience you can grow many trees from cuttings.
Golden Chain Tree
$\$ 1.00$ per foot
White Dogwood, 3 ft . to 5 ft ., each ----- 5.00
Pharchysandra Terminalis-Spurge
Growncover 50
White Oak, 1 ft., ..... Per ft. . 75
Pin Oak ..... Per ft. . 75
Scotch Pine, 1 ft . to 2 ft . ..... Per ft. 1.00
Norway Spruce, 6 in. to 12 in., each ..... 1.00
White Pine, I ft. to 3 ft ., each - 1.00 per foot
Arbor Vitae, Pyramid, 4 ft., -.-.-.- 1.50 per foot
Pondersoa Pine, 1 ft . to 4 ft . ..... 1.50 per foot
RhododendronHolly
Magnolia, 3 ft . to 4 ft . ..... 7.50
Abelia Grandiflora ..... 1.00
Euonymus, Radicans Vegetus, Medium ..... 1.50
Lilac, Fr. Pres. Grevy ..... 2.00
Willow, Weeping, Niobe ..... 1.00
Syringa, Vul Chas Joly ..... 2.00
Syringa, Vul Mad Abel Chatenay ..... 2.00
Juniper, Sabina ..... 2.00
Pine, Scotch, Pinus Sylvestris ..... 1.50 per foot
Pine, White, Pinus Strobus ..... 1.50 per foot
Arbor Vitae, Thuja Orientalis ..... 2.00
Juniper, Virginalis, Dark Green ..... 5.00
Juniper, Chinesis Pfitz. Auera ..... 2.00 per foot
Juniper, Virg. Hilli ..... 2.00 per foot
Mahonia Aquifolium ..... 2.50
Moraine Locust ..... 1.00 per foot
Virbinium T. Plicatum ..... 1.00
Lake City Elm, 6 ft . to 12 ft . ..... 75 per foot
Minneapolis Elm, 8 ft . to 12 ft . ..... 75 per foot
Vace Elm, 8 ft . to 12 ft . ..... 75 per foot
Euonymus Patens ..... 2.50 to 5.00
Boxwood ..... 25 to 2.00
Sour Wood

$\qquad$
Sweet Gum ..... 1.00 to 2.50
Dogwood, White Flowering, 3 ft ..... 5.00
Plant Foods Must Be Soluble

| 1. Nitrogen | 14. Iodine | 27. Tin |
| :--- | :--- | :--- |
| 2. Phosphorus | 15. Zinc | 28. Barium |
| 3. Potassium | 16. Chlorine | 29. Strontium |
| 4. Calcium | 17. Arsenic | 30. Molybdenum |
| 5. Magnesium | 18. Silica | 31. Zirconium |
| 6. Sulphur | 19. Oxygen | 32. Titanium |
| 7. Sodium | 20. Hydrogen | 33. Vanadium |
| 8. Iron | 21. Silver | 34. Krypton |
| 9. Boron | 22. Nickel | 35. Berylium |
| 10. Carbon | 23. Lead | 36. Scandium |
| 11. Urea | 24. Aluminum | 37. Gold |
| 12. Cobalt | 25. Selenium | 38. Chromium |
| 13. Manganese | 26. Copper | 39. Rare Earths |

Different kinds of plants require plant foods that are different. For example, the bean family; some varieties require much lime and other varieties grow well with little lime. Some varieties like water in large quantities, other varieties like a moderate amount.

Grass contains silicon generally.
Seaside plants often seem to be benefited by salt, as asparagus, tulip bulbs, etc. Apply with salt shaker because an overdose will injure.

Cobalt may benefit hydrangea.
I have heard of different kinds of strawberries growing from Mexico to within the Arctic Circle.

## Water and Moisture

Average daily temperature -

| 40 degrees | once or twice a week |
| ---: | :--- |
| 50 | $\prime \prime$ |
| 60 | 3 times a week |
| 70 | once a day |
| 80 | twice a day |
| 90 | 2 to 3 times a day |
| 100 | 3 or 4 times a day |
| 110 | 4 times a day |
|  | $\prime$ |

These plants will not need to be watered so often when they grow larger roots, but in summer, they should stand in mud once every three or four days for top production. I generally run the water around them for two hours each time. Once in a while, it might run all night.

## American Association of Nurserymen

The American Association of Nurserymen includes over 1,500 nurserymen from the United States and Canada and perhaps a few associate members. I joined this association as a member several years ago.

Our aim is to beautify America and make it fruitful. We also exchange ideas, seeds, plants, etc.

Nebraska has about a dozen members. We will help you in various ways to make the Parks and Roadsides more beautiful as well as planting orchards and landscaping your home whether in town or in the country.

Our first job is to gather seed and see that it is correctly labeled and of good quality. Seed collectors help collect and distribute the seed but the growing is done exclusively by nurserymen who specialize in growing seedlings. Some of these we sell, others we transplant one or more times and sell them as trees. Sometimes we find marked variations in foliage or fruit. When we consider these variations of value, we propagate by root or twig cutting, other times by budding or grafting. Then these grafts are shaded and watered as needed and transplanted to grow larger until they are ready for sale. These trees are generally transplanted when one year old or root-cut every two years. That system forms a compact root system that can be transplanted much more readily than a seedling tree that has never been transplanted.

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