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#### Abstract

A Frank Statement.... Buying nursery stock has four elements, one more than any other kind of merchandise. Besides quality, service and price you must consider time. A White Flowering Dogwood is much the same in all nurseries, but it can be 1 year old (about 12 inches) or 5 years old (about 8 feet). Within these sizes we can ship safely and economically, our prices are lower than most local nurseries even when express costs are allowed for, and we can make shipment at proper planting time.


## It Pays to Plant Things Small

Nursery stock, unlike any other merchandise, increases in value as it gets older. More precisely, a planting worth $\$ 1000$ can be set out two years earlier for $\$ 500$, or four years earlier for $\$ 250$. Plants just about double in value every two years. Moreover, the labor of planting more than doubles every two years: Three men might take two hours to plant a 20 -foot tree; the same tree when 6 feet high can be set out by one man in twenty minutes! Consider the time saved in planting evergreens small enough to be safe without an earth ball! And as for the fun of it, watching young trees grow into specimens is more interesting to most folks than looking at the specimens after they are grown.
In most trees and shrubs there are three sizes: 1. Babies that have to be nursed. 2. Transplanted young plants that need only a year or two of ordinary growth. 3. Landscape sizes, already shaped and filled out. For most gardeners, the second size is the most fun and the most economical.

Beginners think looking at a plant enables them to tell quality. It does tell present size and bushiness (in this catalog we give measurements and transplantings for this same purpose) but it does NOT tell what the roots are like. Each transplanting makes a plant stronger, readier to take hold when finally sold. Transplanting is the chief cost of a plant before digging. For this vital factor you have only the faith and credit of the nursery company. We have made a point of telling the truth so far as is humanly possible since the year 1878 .

## It Pays to Buy the Best Kinds Only

Never buy the wrong thing because a young plant of it looks nice-or is cheap-because plants grow up and when mature they may not look nice nor be suitable and must be thrown away. Whatever you spent is wasted. If you cannot afford a large size of the right kind, then buy a small size and wait a few years. Local nurseries often have only a few inferior sorts. We offer a more complete selection in this Guide than can be found in any one nursery in America.

Since all cannot be grown in any one soil or climate, not all parts of each order can always be shipped together. Indeed, some items we find advantageous to have grown by specialists who grow nothing else:-e.g., Fruits, Perennials, Young Aristrocrats, and several of the rarer and more difficult varieties throughout the Guide. But we do arrange to have arrivals at approximately the same time.

## IT'S EASY TO ORDER

Fill in the order form, or use blank paper, and enclose check. You will get prompt acknowledgement. When proper shipping time comes, you will get shipment-express charges collect.
But order now-don't wait. Nursery stock must be ordered in advance. Our whole year's sales must be shipped in a few weeks of shipping sea-sons-April-May and September-November. There is never enough labor, so schedules must be made in advance.
To make sure plants do not lie too long in the Express office, tell your agent to phone you at your expense when they arrive-instead of writing.

## MONEY-SAVING TIPS

Five are often cheaper than four! It costs nearly as much money to dig one plant as 5 of the same kind. A man must go to the field, locate and inspect, tag, dig, return to packing shed-each kind separately. We reflect the saving if you order several of one kind by a rate per 10 much cheaper than per each-and 5 are at the 10 rate.

Freight is too slow for most plants. In the end it is cheaper to use express. Costs are not expen-sive:- $10 \%$ to $15 \%$ covers express charge on anything not marked B\&B. (Balls of earth of course weigh much more and may run $30 \%$ to $50 \%$ of the cost of plants.)
to common as well as proper names of all plants offered and described in this Short Guide.





High Quality; Low Price-Nursery stock grown on suburban land worth $\$ 1,000$ an acre is no whit better than that grown on farm-land at $\$ 100$ per acre.

Enormous selection-No one nursery can grow even half the varieties we list. We offer the products of more than 30 growers, over 20,000 acres of nursery stock.

Reliability-We are a responsible source of supply, established in d878. We try to be more than fair, always.

Gyarantee-So many hidden dangers of soil, climate, etc. We can NOT guarantee plants to live. But we take half the risk

## (1) 1 dr (bataranter

A credit of $50 \%$ will be allowed for every plant that dies the first year-regardless of its condition upon arrival.
Broken, delayed (dry) or damaged shipments must be signed for "under protest" and claim made to Express Co. (They only accept packages in good condition and guarantee good arrival.) We will guarantee $100 \%$ also, if written at once, while you wait refund from the Express Co.

KELSEY NURSERY SERVICE
L. E. Manning, President
C. N. Skinner, Vice-Pres.

# basic requirements of <br> Plant <br> Lifer 

In this Short Guide it is taken for granted that most trees and shrubs require normal food, air and water. Thus a plant needing more air than usual at its roots is marked "loose soil" or "drain". Plants very easy to grow are referred to as "tolerant", or may have no notes whatsoever.


## CLIMATE MAP

The numbers $I$ to VII in the map refer to Zone numbers printed after each plant name throughout this Guide. It shows the north ern limit beyond which any given plant cannot grow. This is not a perfect rule. Two modifications might be mentioned. East of Indianapolis, a damper climate makes all evergreens hardier. West of Indianapolis hot western summers make deciduous trees hardier than rated in this Guide.

## Soil Tests

Sudbury Kit tests for nitrogen, phosphorus, potash and acidity. No technical skill required. Results apparent immediately. Sample Kit-Postpaid \$2.00 (Complete with instructions). Larger Kit-\$4.75 postpaid. Enough to make 10 complete tests as above.

## — LEAVES -

## AIR—"wind", "city air"

Carbon is absorbed from air. Ordinarily the gardener has no worries about the leaves getting air. Some plants (like Hemlock) burn in strong winds. Bad city air is harmful to some trees (like Sugar Maple).

## LIGHT-"sun", "shade"

Light makes the chlorophyl factory turn its wheels. All plants need some. Those that get along best on little light are marked "shade" in this Guide. Those that need a great deal are marked "sun".-Normal plants are not marked-they live in sun or part shade.
— ROOTS -
AIR-"loose", "heavy", "drain"
Roots get oxygen from air that filters into the earth. Some plants need more than others; these must have loose soil and will suffocate in heavy damp clays. Such plants are marked "drain" in this Guide.

## WATER-"damp", "dry"

Roots can only use chemicals that are dissolved in water. Some plants need more than others and die in severe droughts. In the descriptions such are marked "damp". A loose soil quickly dries, a heavy soil keeps damp. Thus water and air for the roots are both present in a mixed soil. Normal plants' that thrive in this "ordinary garden soil" need no notation.

## FOOD-"humus", "rich", "barren"

a. Potassium-most soils have plenty.
b. Phosphorus-needs to be added in most soils.
c. Nitrogen-Fertilizer supplies it, but water quickly leaches it out, so permanent plants depend on bacteria in the soil. These bacteria depend on: 1. Acidity of soil, 2. Drainage of soil, 3. Humus in the soil.
d. Iron, lime, etc., usually present anywhere.

## Ways to Improve Your Soil <br> SOIL FACTS <br> \section*{LIME:-}

Barren-Clay has no air, sand no food. Even a mixture of clay and sand alone does not make soil fit for most plants. Loams-As soon as humus is added, the soil becomes a "normal" soil. Air, food and water all complete. In addition, soil bacteria start living on the humus and release nitrogen thus making "top-soil".
HUMUS:-In some form, is useful to all plants.

1. Lightens heavy soil.
2. Adds water storage to light soils.
3. Is nature's own food.

Warnings-Renew every two years.
Peat and Peat Moss:-The best all around humus.
leafmold, woods clearings, dead leaves, etc.: Also
good, though apt to be unsightly, unless finely shredded.
Manure:-Best fertilizer-humus. (See Mulchnur below.)

1. "Sweetens" the soil-that is, reduces acidity.
2. Promotes decay, so provides quick food from humus in soil.
3. Flocculates clay soiis:-Thus making clay into loam.

ACID:-To acidify soils, aluminum sulphate is quickest, but there is danger of damage in heavy soil. Straight sulphur (in commercial form as powder) does the same job in about 2 weeks and is harmless and easily obtained. An ounce to a square yard, sprinkled on the surface.
FERTILIZER:-All plants in gardens benefit by having plenty of food.

1. Strong growth-hence hardier.
2. More flowers. Better color.
3. Healthy plants--hence freer of disease.

## USE NATURAL FERTILIZERS FOR PERMANENCY

 rect mulch. Moisture 25 to $40 \%$ (feels dry). Sold in 100 lb. bags- $\$ 1.50$ each. (Covers 300 sq. feet.) Excellent soil conditioner.Mulchnur-For spreading on lawns, gardens, etc. It contains peatmoss, manure, and enough tobacco dust to discourage cutworms, moles, etc. Fertilizing value is high:-Nit. $2.8 \%$, Phos. $1.5 \%$, Pot. $1 \%$. Comes clean, dry, shredded, ready to use.

Lawns: Use 1 pound to 10 square feet.
Beds, etc.: 1 pound to $21 / 2$ square feet.
1 bag ( 50 lbs .) covers 500 ft . lawn. $\$ 2.00$.

Hyper-Humus - Peat that has been spread out, fertilized, and planted to a crop. Then screened and bagged. Full of soil bacteria. Best top-dressing there is. 100 lb . bag $\$ 1.80$.

# Basic Plant Culture 

The root of a plant is a mine, completely hydraulic. The tiny root-ends draw in moisture and this is carried through the larger roots up to the leaves. The moisture is filled with dissolved chemicals. In no other way can food or water enter.
The leaves of a plant are chemical factories; sunlight is their power. They combine the chemicals from the roots with carbon from the air and make food-bearing sap which feeds growing parts everywhere. These two ideas govern all plant culture.

## Helping a

## Transplanted Plant

The problem is that the root tips have become torn from their microscopic contact with soil particles, hence careful packing of loose soil and then watering to flush it tightly into place is necessary. Each class of plant has separate preferences, but generally:

## PRUNING

The best the roots can do is far less than the tops need. Nursery-grown, transplanted roots contain more roots in a practical shipping size, but at best much pruning of the top is needed. This reduces the need for food and drink to a point the transplanted roots can provide for.

## WATERING

Flushing the soil into place thrice a week for the first week or two is desirable, unless a good rain falls. Also, the roots being damaged and at a disadvantage, this extra water enables those roots still working to increase their intake.

## FEEDING*

But frequent watering flushes the food out of the surface soil quickly, hence one or two of the waterings might be enriched with manure water, or dissolved commercial fertilizer. The amount,, small. Ordinary fertilizer application seldom dissolves in time to help.

## PROTECTION

A mulch of leaves or humus helps keep the earth from drying out, hence is a substitute for extra water, after the first settling of the soil. Wrapping or wax-spraying of bark also keeps bark from drying out first winter-a common cause of damage or loss.

[^0]
## Helping a

## Plant Grow

This is different entirely from helping in transplanting. Less water, more food, less pruning and no protection (if hardy). Established plants can get along without any assistance at all, but these things hasten and improve growth:

## WATERING

Only when drought threatens is an established plant in need of water, except for kinds set in insufficiently moist positions, or with insufficient shade. Do not give frequent small waterings-they draw the roots toward the surface which is very bad. Once a week (in drought) water very heavily indeed. Chemicals are thus dissolved as food for the roots, and the stale atmosphere between the earth particles is driven out by the flood. (When it drans away, fresh air is drawn into its place. Since roots need oxygen to breathe, this "pump" effect is very important.)

## FEEDING

Most plants in ordinary garden soil need no fertilizers. But some do (roses, etc.) and any plant can be hastened materially in growth by putting reasonable quantities of any fertilizer on the top of the ground in May. On top, so it dissolves and sinks down to roots; scratch it in, to prevent blowing. In May, because later feeding may induce soft sappy growth that does not harden off by autumn (may be damaged the next winter).

## PRUNING

Every spring some damaged or badly placed branches must be removed from trees and shrubs. Every year or two, old heavy shrub stems should be cut out at the ground to keep the plant young and healthy.


## Helping a <br> Plant Flower

The most blooms do not come on the most vigorous plant. Chemistry decides inside the stem which buds are to be leaf buds and which flowers. Too much nitrogen makes all buds leaves. Hence, to encourage blooms, you help the leaves and hinder the roots.

## HELPING THE LEAVES

Not much can be done except give the utNot much sunlight. Remove shade, transplant plant, or prune out bays so light can enter interior of thick bushy plants.

## HINDERING ROOTS

First, stop fertilizing (except phosphorus, as in bone meal). Stop watering, so food still in soil will not be dissolved. If necessary, prune roots with spade or transplant entirely, clipping back roots.

## THINGS TO AVOID

Do not prune plant top severely. Do not fertilize heavily, nor water (except in fertilize hency). These things actually delay flowering.

## Helping a <br> Plant Fruit

A flower is a fruit in most cases and in most kinds of plants. But two exceptions exist: (1) Inbred named varieties of fruits. These must be cross-pollenated for fruits. These must hee page 60 for details; (2) A few kinds in which male and female flowers are always on different plants (Hollies, Yews and Buttersweet). When available, one male of each can take care of all the females in the garden. But males must be grown from cuttings or grafts to be certain of sex and hence (having small sale) cost much money. The easy way out is to plant a group of inexpensive mixed-sex seedlings and, after a few years testing, "rogue out" (discard) all but one or two males. It is actually less expensive to plant, say, 10 seedlings than to buy 1 plant of known male sex!


# GARDENW 

00 HERE are gardens that take care of themselves.. Almost every one of the beautiful things that live in our gardens grows wild somewhere. Many, of course, are improved by care of some sort. Yet, there remains a large number of thoroughly important and delightful plants which cannot honestly be said to receive any improvement whatever from cultivation.

## The Labor Saving Secret

To make a labor-free garden, first consider carefully your location as to drainage (sand, clay, etc.) ; normal rainfall or local ground water; richness and acidity; and the amount of sunlight. Then plant in any given location only such material from the accompanying lists that thrives in that particular spot. Do not attempt to persuade a misfit to survive. If this rule leaves you with the kind of garden you do not want, then try permanent changes such as lightening clay soil with cinders and sand, or add body to sandy soil with peat moss. Acidity can be controlled with applications of lime or of sulphur. But treat large sections of the garden as a unit-do not attempt to grow acid and sweet-soil plants side by side. Put each kind together under uniform treatment. That's all there is to it, and you have saved ninety per cent of your labor and your failures.

## Selecting the Best Kinds

Too many trees spoil a garden, so while most trees need no care, pick a few and mostly medium sized or small kinds that give some bloom or are exceptionally handsome.

The Shrub beds should be deeply dug, drained and permanently improved. The same with Perennial beds. Select varieties that give the most show of flowers over the longest period. But confine selections to the lists at the right. For fuller descriptions, photos, etc., find it in the descriptive part of this Guide

## A Word of Caution

This brief hint is not intended to describe how all gardens should be made with the least effort. Owners of modest, but rather large, summer places; owners of camps, of wood-land, meadow land, abandoned farms; all can find here some help in having beauty without too much work or expense. Literally hundreds such have called in or written to us in the past few years with such problems and this modest study is their answer. The table appended is not perfect but the best that can be done until the science of ecology becomes more complete and exact. (We welcome criticism.)

## Weeding

By maintaining a loose surface (humus and sand mulch is easiest) all weeds can be pulled with great ease and, in fact, fewer weeds seem to appear.

## Let the BIRDS Control your INSECT PESTS

Keeping insects down by poison is efficient. But new poisons kill and drive away many birds, kill honeybees, without which fruit would be unable to form. Birds, after all, keep down insects well enough to permit gardens. Some birds are great insect eaters, some eat none. Attract the insect-eaters (marked "•" in table below) by providing their favorite shrub foods. They live on insects and only eat the berries for dessert!


## SHRUBS THAT ATTRACT BIRDS



# that Thrive under neglect 

PLANTS $\begin{gathered}\text { THAT TAKE CARE } \\ \text { OF themselves }\end{gathered}$


## BOOKS

## of Real Help to Gardeners

(Postpaid Prices)

## Garden Dictionary (Taylor) -

 (Gold Medal of Mass. Hort. Soc.) -1,200,000 words. 896 large pages, 500 illustrations. Sold (new) at $\$ 17$. now reduced to $\$ 7.50$. Very complete and satisfactory.Principles of Fruit Growing (Bailey) - Tells where to locate the orchard, how to plant, cultivate, prune, spray for high production. Methods of harvesting, grading, and marketing. 432 pages. \$3.50.

Garden Flowers in Color (Foley) -Here is the only book to show the important garden flowers in accurately colored photographs - 350 of them. Also brief culture descrip. tions. \$2.49.

Garden Bulbs in Color (McFaf. land, Hatton, and Foley) - 275 color plates form an invaluable aid to the selection and arrangement of varie. ties for your garden. Also 100 half. tones and cultural directions. 296 pages. \$2.49.

The Book of Perennials (Hottes) -Not complete, but the best non technical work we know. \$2.00.

Hortus Second-Garden Diction ARY (Bailey) -Perhaps the best dic. tionary for America. Covers everything from Forest trees to vegetables and house plants. 778 pages. $\$ 12.00$

Manual of Cultivated Trees and Shrubs (Rehder) - Unique. In a mere 990 pages is all most of need out of the Index Kewensis. Our hardiness chart adapted from this author. New edition $\$ 10.50$.

The Book of Shrubs (Hottes)Complete and interesting. 448 pages. Covers its subject better than any other book we know. (Revised.) $\$ 3.00$.

The Book of Trees (Hottes) - A companion to the above. Just as good, except on coniferous evergreens. \$3.50.

The Cultivated Conifers (Bailey) -The best for the evergreens-descriptions, culture, diseases, photos. 404 pages. $\$ 7.50$.

The Book of Climbing Plants (Hottes) - Again, the best popular work on the subject. 250 pages. \$2.00.

Standard Cyclopedia of Horticul ture (Bailey) -Again, in our opin10n, the best non-technical complete reference book. New edition. $\$ 20.00$.

## Start a <br> Home Nursery

$\mathbf{W}$ ise old gardeners, you will notice, always have a few rows of trees and shrubs growing for future plantings. They do not depend upon buying everything as they need it. Now that we are coming out of the age of jazz and impatience we should remember the quiet wisdom of older days. Do not wait until you need trees - large ones and in a hurry - but look over your grounds and plant now what you may need 3,5 or even 10 years hence.

## A MINIMUM SIZE-NURSERY

To indicate how really small a home nursery can be, and still be useful, we offer sketch and notes. The Young Aristocrats on next page would mostly class as Size C and serve, after maturing, to fill in foundation planting soon to need re-planting but which can be made to do until the new plants are of
size.


The plan shows a corner of a lot using a 9 by 12 foot area for a nursery-no more space than used by a small specimen tree. The shrubbery masks the area. Exposure is planned as if north were at the top-but any exposure would do, locating the Lath-screen in shady spot.

## Soil Preparation

The lath-house soil should be sandy loam with an original dressing of 3 inches of manure worked on to a spade depth. The nursery itself can be heavier soil, but requires manure as well. Avoid lime.

## A-Seedlings or Rooted Cuttings

These are babies and must be protected from strong sun the first two years. Planted $2^{\prime \prime} \times 2^{\prime \prime}$, the lath-house would hold 432. After two years, they must be transplanted into the next grade and space. A Yew or a Spruce would be about 6 to 8 inches. Not usable in this size for permanent planting.

## B-Once Transplanted Grade

These are grown as above, or bought already once transplanted. Our 2 yr. and 3 yr . Azaleas would be in this grade, e.g. Space about $4^{\prime \prime} \times 4^{\prime \prime}$ ( 108 in the lath-house pictured here). Carefully shaded the first year, but the second year shade omitted except in drought. In 2 years, they would run about 8 to 15 inches and (of course) now are twice transplants ("XX"). Usable at once as hedge plants, Azaleas for bedding, or any shrub rock garden use, where the

1. Save money and labor
2. Save disappointments
3. Save delays
4. Increase your enjoyment
5. Rare and interesting varieties
6. Culture not difficult.


Lath Screen sketched above is very important for young plants the first summer. Simply built of ordinary lath and a few nails. Screen is rested on the posts.
Heel-in Area. Even a tiny spot kept free for this purpose, enables one to temporatily plant a shipment of plants the day received. They can safely remain for weeks if need be before permanent planting. Water well.
earth pockets are not large enough to set huge roots.

## C-Twice Transplanted Grade

The above can now be moved into the open nursery and spaced $8^{\prime \prime} \times 8^{\prime \prime}$ (the nursery pictured would hold 162) and left for two years. They are "shaped", that is, all straggly branches are lopped off with a sharp knife to encourage uniform shape. They are cultivated and fertilized and watered, no shade being needed. At the end of the 2 years, they will be about 12 to 18 inches or more and are now XXX (three times trans. planted), bushy and shapely. Such plants in this Guide would no longer be marked *, as they are not now "small unformed young plants". They are now ready for use in permanent plantings, except for:

## D-Specimens

A few choice spots in every garden would be spoiled by planting any but larger, well formed plants. Such specimens are grown 2 or more years spaced $18^{\prime \prime} \times 18^{\prime \prime}$ (the nursery pictured would hold 32). At some height between 2 and 4 feet they would be too crowded to remain and would by now be as large as most amateurs would wish to handle.

# Young 

## Deciduous

5 rate (Each)<br>25 rate<br>(Each)<br>\section*{Acer}

ACER PALMATUM ATROPURPUREUM

| (Red-leaved Japanese Maple). |  |  |
| :--- | :--- | ---: |
| 15 to 18 in.................. $\$ 2.50$ | $\$ 2.00$ |  |
| 21 to 24 in................. | 4.75 | 4.50 |

-purpureum dissectum (CutleavedRed Japanese Maple).
$\begin{array}{ll}12 \text { to } 15 \text { in.................. } & 2.00 \\ 15 & \text { to } 18 \text { in............... } \\ 3.00\end{array}$

## Cornus

CORNUS FLORIDA PLENA (double white flowering Dogwood).
12 to 15 in................. $1.90 \quad 1.60$
-Florida Xanthocarpa
(Yellow berry).

| 2 to $21 / 2 \mathrm{ft} . \ldots . . . . . . . . . . . . . . . ~$ | 3.00 | 2.75 |
| :--- | :--- | :--- | :--- |
| 3 to $31 / 2 \mathrm{ft} . . . . . . . . . . . . .$. | 6.00 | 5.50 |

-kousa chinensis (Chinese Dogwood). Blooms a month later than our native. Showiest Kousa.

| 18 to 24 in.................. | 2.50 | 2.25 |
| :--- | :--- | :--- | :--- |
| 24 to 30 in.............. | 3.75 | 3.50 |

## Daphne

DAPHNE MEZEREUM ALBA - White in March on dwarf, sturdy bush. Rare. 18 to 24 in.................. 3.753 .50

## Hamamelis

vernalis (Witch-hazel). Flowers in early Spring before the leaves appear. Order by color: Red or yellow. 18 to 24 in.

## Franklinia

FRANKLINIA ALATAMAHA.

| 8 to 10 in. (pot)....... | .90 | .75 |
| ---: | ---: | ---: | ---: |
| 18 to 24 in............... | 3.00 | 2.75 |
| 5 to $6 \mathrm{ft} . . . . . . . . . . . . . . . . . ~$ | 6.50 | 6.00 |

## Magnolia

magnolia stellata (Star Magnolia) April 10. White.

| 15 to 18 in.................. | 3.00 | $\ldots .$. |
| :--- | :--- | :--- | :--- |
| 18 to 24 in................. | 4.50 | $\ldots .$. |
| 24 to 30 in............... | 6.00 | $\ldots .$. |

-stellata waterlily. Fine new double star, pink Magnolia. Bud hardy. 24 to 30 in. $\qquad$ 7.50
-soulangeana (Pink-Saucer).

| 12 to 15 in.................. | 2.50 | 2.25 |
| :--- | :--- | :--- | :--- |
| 15 to 18 in............... | 3.00 | 2.75 |

-soulangeana nigra (Purple).
12 to 15 in.................. 2.50

## Viburnum

VIBURNUM CARLESSI (May-flowering). 6 to 8 in. (pot).......... 1.251 .00
-burkwood (New Hybrid).
10 to 12 in.................. 1.25
1.10
2.75

# Aristocrats 

UJNUSUAL AND RARE VARIETIES . . . true-to-name because they are grafts and cuttings . . . easy to grow because they have already passed a season out-of-doors. No winter protection is needed, nor other special treatment. All Balled and Burlapped for still easier handling. (Except items marked B. R.) This is a grand opportunity to plant rare and delightful evergreens, trees, and shrubs at little cost. (Weight 1 to 3 pounds each.) F.O.B. Long Island. Our customers find this page more useful every year-particularly as a source for specimens to be grown in the home nursery.

Due to labor shortage, one Young Aristocrat cannot be sold alone-but 5 mixed at the 5 rates, 25 mixed at 25 rates.


Evergreens
5 rate 25 rate
(Each) (Each)

## Abelia

abelia grandiflora (everblooming). 15 to 18 in. (pot) ....... $\$ 1.50 \quad \$ 1.25$

## Azalea

azalea maxwelli (Red, June).
6 to 8 in. (pot)...... $\$ 1.50$
-Hino-Crimson-New, hardy red. 4 to 6 in . (pot) ....... .....- $\$ 1.50$ 10 to 12 in................. $4.50 \quad 4.00$ 12 to 15 in. (bushy).. 6.00 ......
-Kaempferi (Torch Azalea).

| 8 to 10 in. | 1.60 | 1.40 |
| :---: | :---: | :---: |
| 10 to 12 in | 2.25 |  |
| -Ledifolia (White, May). . |  |  |
| 6 to 8 in. (pot) | 1.00 | . 90 |
| 15 to 18 in. | 4.75 | 4.00 |

Evergreens (Continued)
$\begin{array}{cc}5 \text { rate } & 25 \text { rate } \\ \text { (Each) } & \text { (Each) }\end{array}$
Cotoneaster
COTONEASTER HORIZONTALIS spray)
12 to 15 in . ( $5^{\prime \prime}$ pot) $\$ 2.00 \quad \$ 1.75$

## Cedrus

cedrus atlantica fastigiata (Sentinel Cedar). Tall green pillar.
12 to 15 in................ 2.50 4 ft . B\&B.................. 9.00
-atlantica glauca (Silver Cedar). 12 to 15 in.. $\qquad$ 2.75

## Ilex

ilex opaca (Berried grafts). Holly. 6 to 8 in . ( $3^{\prime \prime}$ pot) 1.251 .00

## Laurocerasus

laurocerasus schipkaensis (Laurel). 12 to 15 in.................. $2.00 \quad 1.75$

## Leucothoe

leucothoe Catesbaer (White, April). 12 to 15 in................. 1.90 1.60

## Pieris

pieris Japonica (white, April).
10 to 12 in................. 2.50
15 to 18 in...

## Sarcococca

sarcococca hookeriana. Hardy, evergreen dwarf shrub that thrives in dense shade in poorest of soils. Excellent ground cover. Handsome.
3 -inch pot


## Evergreens (Continued) 5 rate (Each) $\quad \begin{gathered}25 \text { rate } \\ \text { (Each) }\end{gathered}$

## Taxus

KELSEY'S BERRYBUSH YEW.

$$
\begin{array}{lrrr}
12 \text { to } 15 \text { in............... } & \$ 2.50 & \$ 2.25 \\
18 & \text { to } 21 \text { in................. } & 3.75 & 3.50
\end{array}
$$

vermuelen's yew. Shapely dwarf pyramid.
15 to 18 in. XX BR.. $1.50 \quad 1.35$
18 to 21 in................. $3.75 \quad 3.50$
pyramid yew. New 1946. Fine narrow, upright, tall.
12 to 15 in.................
5.00
narrowbush yew. New 1946. Dwarf, but dense and upright.
12 to 15 in................. 5.00
grass-green yew. New 1946. Like Narrowbush Yew exactly, but leaves bright green-unusual in Yews.
12 to 15 in................. 5.00
hick's yew (hicksii).
8 to 10 in. BR.......... . 70 . 65

15 to 18 in. XX BR.- $1.25 \quad 1.20$
dwarf yew (brevifolia) (nana).
8 to 10 in . BR.........- . 70 . 65
upright yew (capitata).
12 to 15 in. X BR...... . 85 . 75

## Tsuga

tsuga canadensis pyramidalus Graceful, semi-dwarf Hemlock.
12 to 15 in.................- $3.00 \quad 2.75$

Azalea Hino-crimson
Franklinia


# HEDGES ... IIving walls 




Hemlock Makes Superb Hedge

BEAUTY and comfort are found in sheltered places. Wind is the first enemy of the gardener. Hedges offer a wide variety of protectionfrom the masonry evergreen effect of Yew and Hemlock to the plumey tall screen of Poplars. Cost depends almost entirely upon the size of plant used-never plant an inferior kind of hedge because the best kind seems costly. Rather plant the right kind in small sizes.


## Hedges Must Grow

No hedge can be kept permanently at any fixed heightthey must be allowed to keep some new growth. Usually an inch a year is enough-or more can be allowed if desired. When a hedge is old and large, the only thing to do is to prune very severely and then let the soft new growth come back for a year.


Two hedges: Thuja and Poplars

Hedges Must Eat

Starving a hedge usually results in a sickly and diseased row of bushes. Fertilize if you want a good hedge. It makes 'em grow, and you have to prune all the more, but you have a nice hedge.

## Start Small

Experts agree that perfect hedges should be started from one to two feet high-or smaller.


Hedge of Taxus capitata 15 to 18 inches xxx photographed same day it was set.


A hedge of Norway Spruce-informally clipped.


A 4-foot hedge, as it looks 6 years after planting above.

## FOUNDATION PLANTING

PROPER PLANTING is not a great, clipped mass of greenery masking a house face-it is merely a low group of green dwarfs to tie the house down to the lawn. Large-growing kinds in ten years become so unsightly they must be replaced or artificially clipped. True dwarf kinds remain for generations growing in beauty every year. True, dwarfs are improved in density and shape by pruning-but that is not clipping. It consists in cutting out whole branches that grow too vigorously. The cut is inside and hidden.
Spacing for dwarfs should be about 3 feet to a plant. At the start, small plants will look "skimpy" but in five years or so will have filled out, to fill the area. To plant closer means taking out every second one after five years.


The above sketch shows the general effect of a proper planting. It is not intended for exact copying, but if anyone desires we offer one each of the four plants sketched, packed, for $\$ 13.00$. ( 2 sets, one each side of door, $\$ 25.00$.) Reading from left to right they are (with size offered) :

[^1]In the shade, we suggest Rhododendrons as offered (Size 3) at the bottom of page 32. The Yews (Taxus) are the only satisfactory conifers in the shade, and go well with Rhododendrons.

## DWARF EVERGREENS

## Suitable for foundations

Low, Spreading Dwarfs Juniperus horizontalis Jun. comm. depressa Taxus bass. repandens Taxus cuspidata nana Tsuga Sargenti

Narrow, Upright Dwarfs Jun. excelsa stricta Juniperus hibernica Picea canad. conica Taxus columnaris Taxus media Hicksi Tsuga compacta

Large, Bushy Dwarfs Azalea ledifolia
Berberis julianae
Ilex crenata Laurocerasus Leucothoe
Pieris japonica Kalmia latifolia Rhododendron Carolina
Catawbiense

## Low, Spreading Dwarfs

## Buxus Koreana

Cotoneaster horizont.
Daphne cneorum
Erica carnea
Hex convexa
Small, Bushy Dwarfs Azalea amoena
Azalea hindodigiri
Berberis verruculosa
Pieris floribunda

## Bushy Dwarfs

Chamaecyparis nana Juniperus Pfitzeri Juniperus Sabina Juniperus Meyeri Picea excelsa Maxwelli Picea excelsa nidiformis Picea excelsa pymaea Pinus Mughus Thuja occid. globosa Thuia, Little Gem
Taxus Vermeulen
Taxus media Kelseyi

# Young Trees 

ONLY with small trees, cheap to buy and plant, can large quantities be handled by the average land-owner. Nature cannot produce them as fast as we cut them. Planting is needed. The government does some, but your help is needed. A million individual acres ( 6 feet apart, 1200 trees per acre) are better than one huge government job of a million acres, because no taxes are spent-on the contrary, a profit will accrue to yourself
or family. Lumber values will steadily rise and never again be as absurdly low as they have been.
But not only for profit. There is fun and beauty in an acre of trees. An empty acre produces nothing. A planted one is handsome, fun to watch as the trees mature, and carries the comforting thought that you are doing something useful for your country and benefiting your pocketbook at the same time!

## EVERGREEN SEEDLINGS

Should be planted about four inches apart in beds. Here they are left two years shaded by a lath screen.

## TRANSPLANTS

Evergreens that have been moved, or have had their roots pruned, form a close compact ball of fibrous roots. To be planted out in the open fields in rows.


SMALL DECIDUOUS TREES Deciduous trees and shrubs need pruning back upon planting. With deciduous shrubs cut to the ground upon setting them out. Trees with a single stem: prune off side twigs when planting, and then a month later go over the planting again and cut away all but one single stem.


THE YEAR AFTER PLANT!NG
These little White Pines were about $11 / 2$ feet high, twice transplanted, and cost about 30 c each.


## YOUNG EVERGREEN TREES

| (25) (100) (1000) | (25) (100) (1000) | (25) (100) (1000) |
| :---: | :---: | :---: |
| ABIES (Fir) | ipers) (100) | PICEA (S |
| amea (Balsam Fir) | unis depressa aurea | alba (White Spruce) |
| green for wet land. Popular for Chri | Golden Juniper) | 6 to 9 in. S........-. \$12.00 \$75.00 |
| mas trees. | 12 to 15 in. X $\$ 15.00 \$ 57.50$ | 9 to 12 in. X-------\$7.00 25.00 190.00 |
| 4 to 6 in . S.---------- \$10.50 \$ 65.00 |  | canadensis (Black Hills Spruce) |
| 6 to 8 in . S $\ldots \ldots \ldots$ | depressa plumosa (Andorra Juniper) | 4 to 6 in. S.-----......-- 12.0075 .00 |
| 6 to 9 in. X.-------\$5.50 20.00 155.00 | 10 to 12 in. X | 6 to 8 in. S |
| CHAMAECYPARIS (False Cypress) | 12 to 15 in. X-------.-12.00 50.00 | 9 to 12 in . X ---------8.00 $32.00 \quad 225.00$ |
| filifera (Thread Cypress) | hibernica (Irish Juniper) | excelsa (Norway Spruce) |
| 12 to 15 in . X ------14.00 55.00 | 8 to 10 in. X -------. $8.00 \quad 30.00 \quad 290.00$ | his species will thrive in shade and |
|  |  | succeeds in heavy, damp soil. |
| filifera aurea (Golden) |  | 2 to 4 in. S.-------..-- 10.50 65.00 |
| 12 to 15 in. X .-...... 14.0055 .00 | horizontalis (Creeping Juniper) | 4 to 6 in. S.---..... $-\ldots-15.00125 .00$ |
|  | 8 to 10 in. X ------.. $8.00 \quad 30.00$ | 9 to 12 in. X ---8.00 $\quad 80.00 \quad 220.00$ |
| pisifera (Sawara Cypress) | 10 to $12 \mathrm{in} . \mathrm{X}$------.-12.00 $40.00 \quad 375.00$ | 12 to $15 \mathrm{in} . \mathrm{XX}$-----16.00 60.00 |
| 12 to 15 in . X -----... 14.0055 .0 | pfitzeriana (Pfitzers Juniper) | gens, Colorado Blue Spruce |
| pisifera aurea (Golden Cypress) | 6 to 8 in. X------------- 31.00 | This species varies in color from |
| 6 to 8 in. X--------9.00 35.00 | 8 to 10 in. X --------9.00 35.00 | be determined until they are older. |
| plumosa (Plumed Cypress) | 12 to 15 in. X----.-.-12.50 45.00 | 4 to 6 in. S.----------- 12.0075 .00 |
| 8 to 10 in. X $-\quad 8.00 \quad 30.00$ | sabina (Savin Juniper) | 9 to $12 \mathrm{in} \mathrm{X}-.\cdots-\cdots-\cdots 80$ |
| 12 to 15 in. X -----. 14.0055 .00 | 6 to 8 in. X $8.00 \quad 30.00$ | 10 to 15 in. XX $-17.50 \quad 55.00$ |
| plumosa aurea (Golden Plume) |  | LARIX (Larch) |
| 8 to 10 in. X...-.... 8.0030 .00 | virginiana (Red Cedar) | European Larch (Europa) |
| 10 to $12 \mathrm{in}, \mathrm{X} . \ldots \ldots . . .12 .5045 .00$ | 6 to 12 in . S.------ 4.0012 .00 | 24 to 36 in . X.-....... 17.5055 .00 |

" S "-indicates seedlings not transplanted. " X "-indicates each transplanting.

|  | (25) | (100) | (1000) |
| :--- | :--- | :--- | :--- |
| PINUS (Pine) |  |  |  |
| mughus (Mugho Pine) |  |  |  |
| 6 to 9 in. X. | 8.00 | 30.00 | 260.00 |
| 6 to 9 in. XX | -11.00 | 40.00 | $\ldots--.$. |


| nigra (Austrian Pine) |  |  |
| :---: | :---: | :---: |
| 10 to $20 \mathrm{in} \mathrm{X} \quad$. | 35.00 | 175.00 |
| to $24 \mathrm{in} . \mathrm{XX}$.--.-16. | 60 |  |

resinosa (Norway Red Pine)

6 to 9 in. S......... $4.50 \quad 13.50 \quad 85.00$ $\begin{array}{lllll}6 & \text { to } & 9 \mathrm{in} \text {. X } & 6.00 & 20.00 \\ 150.00\end{array}$ | 18 | to | 30 | $\mathrm{in} . \mathrm{XX}$ |
| :--- | :--- | :--- | :--- | $15.00 \quad 50.00 \quad 310.00$

sylvestris (Scotch Pine)
The species par excellence for poor soils-even dry sand wastes.
6 to 8 in. S.-.--.-.-. $12.00 \quad 100.00$
12 to 15 in. S......... $5.00 \quad 17.50 \quad 135.00$
(25) (100) (1000)

## TAXUS (Yew)

capitata (Upright Yew)
4 to 6 in. X........ $7.00 \quad 25.00 \quad 230.00$
6 to 8 in. X_-...... $9.00 \quad 31.50$-.-.-....
8 to $10 \mathrm{in} . \mathrm{X}-\quad 11.00 \quad 40.00 \quad 360.00$
9 to 12 in. XX... $19.00 \quad 75.00$
12 to 15 in. XX.... $20.00 \quad 90.00 \quad-\ldots-.$.
cuspidata (Spreading Yew)
6 to 8 in. X.-...... $14.00 \quad 50.00$
cusp. brevifolia (Nana) (Dwarf Yew) 4 to 6 in. X.-.... $8.00 \quad 30.00 \quad 290.00$
6 to 8 in. X--_- $10.00 \quad 33.00 \quad 320.00$
8 to 12 in. XXX.. $22.50 \quad 85.00$.--
media Hicksii (Hicks Yew)
6 to 8 in. X........ $9.00 \quad 35.00 \quad 325.00$ 10 to $12 \mathrm{in} . \mathrm{X} \quad-\quad 15.00 \quad 55.00 \quad 500.00$
8 to 12 in. XXX. $22.50 \quad 85.00 \quad-\quad$.
(25) (100)
(1000)

## PSEUDOTSUGA (Douglas Fir)

taxifolia (Douglas Fir)
6 to 8 in. S.-_-..... $12.00 \quad 75.00$
4 to $6 \mathrm{in} \mathrm{X}-.\ldots . \quad 18.00 \quad 110.00$
6 to 9 in . X-...-. $7.50 \quad 25.00 \quad 180.00$
THU'A (Arborvitae)
occidcatalis (American A. or White Cedar)
4 to 6 in. S._-........ $10.00 \quad 60.00$
6 to 8 in . S.———errr $14.00 \quad 85.00$
12 to 18 in. XX..... $16.25 \quad 65.00 \quad 600.00$ columbia (White tipped)
8 to 10 in. X $\quad . \quad 9.00 \quad 35.00 \quad 270.00$ $\begin{array}{lllll}12 & \text { to } 15 \mathrm{in} \text {. X. } & -12.50 \quad 50.00 \quad 400.00\end{array}$ pyramidalis (Pyramidal A.)
8 to 10 in. X-_-. $8.00 \quad 30.00$
12 to $15 \mathrm{in} \mathrm{X}-.\quad 12.00 \quad 40.00$
TSUGA (Hemlock)
canadensis (American Hemlock)
6 to 8 in. S........ $2.00 \quad 8.00 \quad 40.00$ 12 to 15 in . X.-...... $11.25 \quad 45.00 \quad 400.00$
caroliniana (Carolina Hemlock)
6 to 9 in. S........ $3.00 \quad 9.00 \quad 70.00$
12 to $15 \mathrm{in} . \mathrm{S} . . .-\quad 4.0012 .00 \quad 100.00$

## YOUNG DECIDUOUS TREES

| (25) | (100) | (1000) |
| :---: | :---: | :---: |
| ACER (Maple) |  |  |
| dasycarpum (Silver Maple) |  |  |
| 12 to 18 in . S.---... .-... | \$ 4.00 | 20.0 |
|  | 16.00 | 150.00 |
| rubrum (Red Maple) |  |  |
| 12 to 18 in. | 6.00 | 30.00 |
| 2 to $3 \mathrm{ft} . . . . . .-\ldots . . . . .4 .00$ | 10.00 | 60.00 |
| saccharum (Sugar Maple) |  |  |
| 12 to 18 in...---- | 6.00 | 30.00 |
| 2 to 3 ft .-------.... 4.00 | 10.00 | 60.00 |
| BETULA (Birch) |  |  |
| alba (White Birch) |  |  |
| 4 to $5 \mathrm{ft.------} \mathrm{\quad .-27.50}$ | 110.00 |  |
| populifolia (Gray Birch) |  |  |
| 12 to 18 in | 6.50 | 30.00 |
| 2 to $3 \mathrm{ft} . . . . . . . . . . . . . . ~ 4.00 ~$ | 12.50 | 65.0 |
| papyrifera (Paper Birch) |  |  |
| 12 to 18 in...--........ | 8.00 | 40.00 |
| 2 to $3 \mathrm{ft} ..-\ldots-\ldots . . .$. | 12.50 | 0.0 |
| CATALPA (Speciosa) |  |  |
| 18 to 24 in.............. 2.50 | 7.50 | 45.0 |
| CERCIS (Red Bud) |  |  |
| 12 to 18 in. | 8.00 | 50.00 |
| 18 to 24 in | 10.00 | 60.00 |
| 2 to 3 ft ............ 4.50 | 15.00 | 100.00 |



## FAGUS (Beech)

ferruginea (American Beech)


FRAXINUS (Ash)
americana (American White Ash)


GINKGO BILOBA (Maidenhair)
9 to 12 in............... $4.00 \quad 15.00$
12 to 18 in..--------...... $7.50 \quad 25.00$
GLEDITSIA (Honey Locust) Thornless.
3 to $4 \mathrm{ft} . .-\mathrm{-a}-\mathrm{-}-\mathrm{-a} 3.00 \quad 9.50 \quad 85.00$
HICORIA (Hickory)
lacinosa (Shellbark Hickory)
2 to 3 ft .-------...-... $17.00 \quad 65.00$
ovata (Shagbark Hickory)
2 to $3 \mathrm{ft} . .-\ldots-\quad . \quad 17.00 \quad 65.00$
JUGLANS (Walnut)
nigra (Black Walnut)
12 to 18 in................ $4.00 \quad 12.00 \quad 90.00$
cinerea (Butternut)
12 to 18 in.............. $4.00 \quad 12.00$
LIQUIDAMBAR (Sweet Gum)
12 to 18 in.................. 7.50
40.00

2 to 3 ft ...-.......... $4.00 \quad 12.00 \quad 100.00$
LIRIODENDRON (Tulip Tree)
tulipifera (Tulip Tree)

| 6 to 12 in |  |  | 5.00 |
| :---: | :---: | :---: | :---: |
| 12 to 18 in. |  | 4.50 | 30.00 |
| 18 to 24 in |  | 6.50 | 35.00 |
| 3 to 4 ft | 4.00 | 12.50 | 80.00 |
| OSAGE ORANGE (Maclura) |  |  |  |
| 12 to 18 in |  | 4.00 | 25.00 |
| PLATANUS (Sycamore) |  |  |  |
| occidentalis (American Sycamore) |  |  |  |
| 12 to 18 in. | 4.00 | 12.00 | 85.0 |

(25) (100) (1000)

POPULUS (Popar)
nigra italica (Lombardy Poplar)
18 to 24 in.......-.-.....-- $9.00 \quad 55.00$

3 to $4 \mathrm{ft} . . . . . . . . . . . .$.
bolleana (Boles Poplar)
3 to 4 ft . $\qquad$ $6.00 \quad 20.00$

## QUERCUS (Oak)

alba (White Oak)

| 12 to 18 in...-.-........ 4.50 | 15.00 |  |
| :---: | :---: | :---: |
| coccinea (Scarlet Oak) |  |  |
| 3 to 4 ft .-...-.-...- 25.00 | 85.00 |  |
| palustris (Pin Oak) |  |  |
| 12 to 18 in..... | 12.00 | 95.00 |
| 18 to 24 in. | 16.00 | 125.00 |
| 2 to $3 \mathrm{ft} . .-\mathrm{-a}$ | 20.00 | 160.0 |

rubra (Red Oak, Northern)
2 to $3 \mathrm{ft} . .-\mathrm{-a}-\ldots . . .$.
ROBINIA (Locust)
pseudacacia (Black Locust)
12 to 18 in................... 6.0035 .00
TILIA (Linden)
americana (American Linden)
6 to 12 in....-........ $3.50 \quad 10.00 \quad 85.00$
ULMUS (Elm)
americana (American Elm)
12 to $18 \mathrm{in} .+\cdots \cdots \cdots \quad . \quad 4.00 \quad 25.00$

pumila (Chinese or Siberian Elm)

| 12 to |  | 4.50 | 25 |
| :---: | :---: | :---: | :---: |
| 18 to 24 in . |  | 6.00 | 35.00 |
| 3 to 4 ft | 4.00 | 15.00 | 95 |

## YOUNG SHRUBS

LARGE BORDERS and areas can be set quickly, easily, cheaply with shrubs of exceeding beauty by using these small lining-out sizes. Please do not ask us to fill orders for less than 25 of a kind. Small quantities are offered elsewhere in this book in larger sizes. This small size is only for quantity use. Cut back to the ground either when planting or after one summer's growth. Then the top comes up anew from the ground, bushy and shapely. They are not bushy now, but healthy and viable. After thorough planting and watering, in suitable location and soil, they can actually be forgotten until in 3 to 5 years they become blooming specimens.



## EVERGREEN SHRUBS

ILEX (Holly)
Opaca (Amer. Holly) Female Cuttings.
6 to 8 in....---------. 27.50100 .00
glabra (Inkberry)
6 to 8 in. X ---... $8.00 \quad 30.00$
18 to 24 in. X----.... 16.0060 .00
crenata (Jap. Holly)
6 to 10 in. S.-.-.-.- 6.0020 .00
8 to 10 in. X------ $10.00 \quad 37.50$

## KALMIA

latifolia (Laurel)
9 to 12 in. S.----....---.- $10.00 \quad 85.00$
12 to 15 in. S........ $4.50 \quad 15.00 \quad 110.00$
LEUCOTHOE
cataesbaei
$9^{\circ}$ to 12 in. S.....- $\quad 10.00 \quad 85.00$
12 to 15 in. S..-..... $4.50 \quad 15.00 \quad 125.00$
PIERIS
Japonica (Japanese Andromeda)
$21 / 4$ in. pots.--------- $7.00 \quad 25.00 \quad 195.00$
6 to 8 in............... 17.5065 .00

## RHODODENDRON

Maximum
9 to 12 in. S...-------- $10.00 \quad 85.00$
12 to 15 in. S.-.---. $4.50 \quad 15.00 \quad 125.00$
catawbiense and R. Carolina
9 to 12 in. S.-.-.-- .-.... 12.50100 .00
12 to $15 \mathrm{in} . \mathrm{S}-----\quad 5.50 \quad 18.00 \quad 140.00$


## APRACTICALFOREST-CROP PLAN

A. TIMBER—12 ft. apart (402 to acre). Leave 40-50 years. Mean-while:-
B. XMAS TREES on same land set 3 ft apart ( 3630 to acre). 10 years.
C. PULPWOOD - Six feet apart (808 to acre). Crop, 20 years. Mixed planting, including hardwood, reduces fire risk, minimizes diseases, increases cash return and diversifies. Total, 4800 per acre

To give some rough idea of what is possible, we here outline a use for idle acres that will at least pay taxes and interest: Cost: Planting 4800 trees to the acre, about $\$ 100$ for trees and $\$ 100$ for planting.
Crop A: Christmas Trees. 3600 trees in 10 years, value about 50 c wholesale. A gross return of $\$ 1800$ up.
Crop B: Pulpwood. 800 trees in 20 years, say 30 cords at about $\$ 5$. A gross return of $\$ 150$ at least.
Crop C: Timber. 400 trees left 12 ft . apart for your grandchildren. Worth in 40 years over $\$ 400$ an acre.

## SUGGESTED VARIETIES

Timber Spruce and Pines Black Locust (posts) Ash and Hickory Walnut, Oak

Pulpwood Norway Spruce White Spruce Red Pine Scots Pine

Xmas Trees
Norway Spruce White Spruce Douglas Fir Balsam Fir

## Bargains in Larger Young Trees

THOSE who want quick results yet not have to pay for full specimens can here select from the best kinds of trees at enormous savings. We offer nice, well-rooted, transplanted stock between 4 and 8 feet high. They are young and transplant more easily and grow more vigorously than older stock. Yet you save 2 to 4 years over small seedling sizes at little extra cost. Packing included if cash accompanies your order.
(10) (100)

ACER platanoides (Norway Maple)...-8 feet $\$ 30.00 \$ 280.00$

| " | rubrum (Red Maple) | 4-6 feet | 6.00 | 40.00 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 6-8 feet | 9.00 | 65.00 |
| " | saccharum (Sugar Maple) | 4-6 feet | 6.00 | 40.00 |
|  |  | 6-8 feet | 9.00 | 65.00 |

betula alba (European White Birch)

$$
4-5 \text { feet } \quad 12.50 \quad 110.00
$$

" populifolia (Common "White" Birch)


## CORNUS florida

(White Flowering Dogwood) -.......... $4-6$ feet 11.0085 .00
FAGUS americana (Amer. Beech) --... 4-5 feet $9.00 \quad 65.00$
FRAXINUS americana (White Ash)....5-6 feet $9.00 \quad 75.00$
GINGKO biloba (Maidenhair Tree).....3-4 feet $10.00 \quad 85.00$

GLEDITSIA triacanthos


## MORUS tartarica

(Russian Mulberry) ......................... 4-5 feet $8.00 \quad 60.00$

## POPULUS Italica

| (Lombardy Poplar) .-..........-....-4-5 feet | 5.00 |
| :---: | :---: |
| tremuloides (Quaking Aspen) ..-6-8 feet | 6.00 |


| QUERCUS Bicolor | (10) | (100) |
| :---: | :---: | :---: |
| (Swamp White Oak).................-6-8 feet | 25.00 | 225.00 |
| " Coccinea (Scarlet Oak)..............4-5 feet | 15.00 | 100.00 |
| * Macrocarpa (Bur Oak) ...............-4-5 feet | 17.50 | 150.00 |
| Palustris (Pin Oak) .... .-..-.-.-...-6-8 feet | 30.00 | 250.00 |
| " Rubra (Northern Red Oak) ......... 5-6 feet | 30.00 | 250.00 |
| " Velutina (Black Oak)...............--5-6 feet | 25.00 | 225.00 |
| SALIX Babylonica <br> (Weeping Willow) 6-8 feet | 25.00 | 200.00 |
| - Vitellina aurea <br> (Golden Willow) $\qquad$ 6-8 feet | 20.00 | 150.00 |
| " Niobe <br> (Golden Weeping Willow).-.....-. 6-8 feet | 25.00 | 200.00 |
| SORBUS Aucuparia (Mt. Ash) -.-. - | 17.50 | 160.00 |
| TILIA Cordata (Small-Leaf Linden) -...5-6 feet | 20.00 | 180.00 |
| ULMUS Americana (American Elm) ....4-6 feet | 8.00 | 50.00 |
| Pumila (Siberian Elm) .--morere 5-6 feet | 8.00 | 50.00 |

## PLAN AHEAD — PLANT NOW

Since a young tree requires little care, and is much less expense and trouble to plant than a large one, it pays to plan ahead. Order and set out NOW the trees you will need in your plans for the future.

ON these ten pages are packed more information and variety than many a large perennial catalog. Strong, sturdy field-grown clumps are offered, except for kinds that do best in pots. Pereanials are not shipped until late April and May as a rule, but ORDER NOW to avoid disappointments. We'll ship at the right time.

## PLANTING



Root Clumps. Most perennials come as sketched above. Here the main object in planting is to work the loose earth well in among the roots. Spread roots gently to allow of this. Then water well for three or four days to settle. If growth has started, shade as with a strawberry box or other available means from direct sun first few days.
Potted Plants. These come without the pot, of course, but the mass of roots is already in a little earth ball. All that is needed is to press barden earth around earth ball and water. Very easy.
Tap-rootbd Plants. Some kinds of perennials have a tap root which must be preserved; other kinds have a tap root which can be cut. If the tap root is present on arrival, do not break. Dig a deep narrow hole and sift dirt down wrount root carefully.
Fleshy, bulb-like Roots. These are very easy to plant. Merely set shallowly and firm earth around. If the rhizome has eyes (Peonies or Mertensia) be sure eyes are pointed upward and not downward. Actual depth is not very important, as they will force themselves to right depth first season.

## PLANNING PERENNIAL BORDERS

Planning a perennial border is an art but its basic principles are simple and can be learned by reading these few paragraphs. We have made below two demonstration plans using only such material as is offered on the next spread, pages 18 and 19. All the facts needed are there given. With the larger choice given by the additional four pages of perennials following, improvements can be made-but the plans are harmonious in color and give a show at all times during summer.

The first step is to run through the lists noting soil requirements. Jot down the names of all kinds that interest you and that will grow on your location. After each name set a mark to show height-low, medium or tall. Group the names in three lots-late, early and all-season bloomers. Now begin with the favorite flower. Say, in the sunny border below this is Delphinium. It is tall, late. Its spacing is about 12 inches. On paper marked in foot squares draw a boundary line covering three square feet (any shape) and write 3 Delphinium. This is minimum quantity, as 1 or 2 make no show. Now the late garden is established as blue. So a companion plant is all-season bloomer Aster Frikarti (Wonder of Staeffa). This also sets the early garden as blue so heighten the early blue effect with a medium tall Anchusa. With blues generally, particularly on the lavender side of blues, yellow is a fine complementary color. So a yellow Chrysanthemum and other yellow plants are used in front to cover the entire summer, For each, the planting distance is carefully drawn on the paper. Changes can be made with the eraser until you get it to suit available space.

The Shade border is more complicated only in color blending. On the right is an early blue with all season pink, yellow and bluish mixtures behind. In the center a blaze of early red and at the left one spot of early orange. Later in the summer, on the left is a white, with a rose behind it and orange to brown beyond. Then at right are again the all-season mixtures of pinks, blues and yellows. Here the favorite plant is Aquilegia (Columbine) and the blend of tones in this flower is pink, blues, yellows and a little white. So the whole garden matches them, with the blazing Astilbe for an early tone value.


Sunny Border $6 \times 3$ feet Complete, 21 plants as below $\$ 8.70$ Key

Variety
3 Delphınium Belladonna Aster Wonder of Staeffa 3 Chrysanthemum Yellow Cushion
Anchusa myostidiflora Helianthemum Buttercup Alyssum saxatile compast Coronilla cappodocica

| Shady Border $6 \times 3$ feet |  |  |
| :---: | :---: | :---: |
| Complete, 24 plants as below $\$ 11.80$ |  |  |
| Key | No. | Variety |
| H | 3 | Hemerocallis (Orange collection) |
| J | 6 | Digitalis Shirley hybrids |
| K | 3 | Dicentra eximia |
| L | 3 | Aquilegia Longspur Hybrid |
| M | 3 | Achillea The Pearl |
| N |  | Astilbe Fanal |
| p | 3 | Ajuga reptans |

Happy combinations of shape and color are the secret of fine plans. Here are some proved good-lookers:-

## SPRING

Dicentra spectabilis-Mertensia.
Dicentra spectabilis-White Iris-Iberis.
Hemerocallis (early)-Baptisia australis.
Hemerocallis (early)-Iris siberica.
Anchusa-yellow Iris.
Veronica incana-Iris kaempferi, white.
Delphinium Bellamosum-Anthemis tinctoria.
Phlox divaricata-Mertensia-Trillium.
(See wildflowers, page 24.)
SUMMER
Hemerocallis (yellow)-Delphinium.
Gypsophila-Lychnis.
Gypsophila-Monarda didyma. (See Herbs.)
Aster frikarti-Artemisia Silver King. (See Herbs page 25.)
Cimifuga racemosa-Asclepias.
Poppy Mrs. Perry-Lilies.
Delphinium-Coreopsis.
Campanula carpatica-Scabiosa caucasica.
Trollius-myosotis.
Trollius-Anchusa myosotidiflora.


Hepatica


Iberis Sempervirens

PERENNIALS last for years in the ground. One plant in New England has been recorded at four generations Most need little care, but some need dividing every year or two and are so marked.
CULTURE, since they are permanent, is important. Prepare the soil extra deep and enrich with manure when planting. Bone meal just before flowering, and normal insect spraying are also necessary, each year.
HARDINESS is sufficient to grow most kinds up to Zone IV. Extra hardy sorts include: Aquilegia, Campanulas, Dianthus, Delphinium, Hemerocallis, Iris, Lilium, Peony, Phlox. Safe to Zone III or II.


Astilbe, Fanal



Alyssum Saxatile


Chrysanthemum, Sigurd
Pink Domino Verbascum


## Peony Primevere



# PERENNIALS (Alphabetical) 

## FRIKARTI ASTER

Wonder of Staefa
The finest garden plant introduced in the last 20 years. Mass of flowers June 1 to mid-November. Sun or light shade. Ht. 30 in., space 15 inches. Lavender blue, branching, to $21 / 2$ ft. 3 for $\$ 1.35$.

## ASTILBE FANAL

The name means "lighthouse" and the blazing, fiery spikes brighten any garden. May-June, 15 inches bigh. Space 12 inches. Rich, bumus, sun or semi-shade. \$.75 each, 3 for \$2.00.

## CUPID'S DART

Catananche Caerulea major
Deep blue, June to September. Dry, sunny. 18-inch. 3 for $\$ 1.35$.

## GIANT DELPHINIUM

## Pacific Hybrids

The only mildew-resistant strain. Huge florets, strong spikes. Gorgeous colors. 3 for $\$ 1.50 ; 12$ for $\$ 6.00$.
UNIFORM PRICED
KINDS: 3 of one kind Inches

## Hardy Chrysanthemums

Here are the best for gardens. All need good drainage, yet water and manure in summer. Pinch back shoots in June and in July. Space 12 to 18 inches apart. Selected particularly for early (hardy) blooming.

## Large Hardy Doubles

All early extra showy, the best out of thousands considered - new and old. All bloom before October. Avalanche-profuse white.
Chippewa-Huge aster-purple from Minnesota. Early.
Goldilocks - Fine canary-yellow balls. Early Sept. Long stem. Lavender Lady-Clear color. Mrs. P. S. Dupont III-Salmon-pink. Red Velvet-Dark, velvet crimson. Any one kind: 3 for $\$ 1.65$. 12 for $\$ 6.00$.
One each all six: $\$ 3.90$.


## Medium-sized Doubles

Only slightly smaller than Large Doubles. Hardier.
Bonfire-Red, bronze. Very hardy
Mrs. C. R. Hastings-Soft rose-red. Purple Jewell-Rosy purple. Tall. Harbor Lights-Cream and yellow. Any one kind: 3 for $\$ 1.35$. One each all four: $\$ 2.00$.

## Large Singles

Koreans and other hybrids. Extra hardy. None quite single.
Carroll Pink-Huge clear pink, double.
Eureka Giant-Gold-orange, double
Primula-Single lemon-yellow.
Red-Bank-Nearly single red.
Sigurd-Coral-red and yellow. Any one kind: 3 for $\$ 1.35$. One each all five: $\$ 2.50$.

## Cushion Pompons

Bushy, 2 ft., covered with very double mostly large blooms in Sept.
Lavender Lassie-Clear color.
Sept. Bronze-Small, gold-bronze.
Sept. Cloud-White, shaded cream.
Sept. Gold-Huge yellow sprays.
Any one kind: 3 for $\$ 1.35$.
One each all four: $\$ 2.00$.
"Azalea" or Cushion Mums
Bushy, covered with semi-double bloom Aug. to frost. Extra hardy. Pink Cushion White Cushion Red Cushion Yellow Cushion Any one kirid: 3 for $\$ 1.35$. One each all four: $\$ 2.00$.

## Hardy Button Types

Bushy little plants, filled with bloom.
Irene-Finest white button.
Jewell-Soft pink pompoms.
Ouray-Rich glowing bronze.
Yellow Irene-Finest yellow.
Any one kind: 3 for $\$ 1.35$.
One each all four: $\$ 2.00$.

## New Northland Daisies

Super hardy (Zone II) and now offered in rich color assortment. 18 inch. Oct. Single flowers.
Astrid-Shell-pink. Oldest. Igloo-Large pure white.
Loki-Dwarf, crimson-purple.
Nancy-Pink, then crimson.
Any one kind: 3 for $\$ 1.35$.
One each all four: $\$ 2.00$.

## New Spoon Types

Each petal a tube, open at end. Unusual. Single or semi-double. 2 ft . early Oct.
Bronze Spoon White Spoon Pink Spoon Yellow Spoon

Any one kind: 3 for $\$ 1.35$.
One each all four: $\$ 2.00$.


PART SHADE PERENNIAL BORDER-Some showy yet labor-saving plants for such a position are:-Beardless Iris, DayLily, Lilies, Liatris, Lythrum, Mertensia, Tradescantia, Aquilegia, Digitalis, Ladies-Slippers, Campanula carpatica and Astilbe Fanal.

UNIFORM PRICED
KINDS: 3 of one kind $\$ 1.20$ (minimum) ( 12 of one kind $\$ 4.00$ )

荌



Special
Cultural Notes

## ASTILBE (See Specials, opp. page)

## BAPTISIA (False Indigo)

-Australis
2418 blue
June
Sun, manure.

## CAMPANULA (Bellflower)

## -Carpatica

89 blue
-Medium
(Canterbury Bell) $\qquad$ 3010 (note

- Calycanthema
(Cup \& Saucer) $\qquad$ 3010 (note
May-June
May-June
Rotundifolia (Scots Bluebell) $\qquad$ 129 blue

June-Aug.
CATANANCHE (See Specials, opp. page)

## CENTAUREA (Cornflower)

-Montana
. 248 blue June-July
Divide 3rd year.
CHRYSANTHEMUM (See Specials, opp, page)

## CORONILLA (Ladies' Fingers)

--Cappadocia $\qquad$ 312 gold June-July

Sun. Trailing

## COREOPSIS (Tickseed)

-Perry's Double $\qquad$ . 2412 yellow June-Aug.

Sun, drain DELPHINIUM
-Chinense Tom Thumb..... 1210 blue
-Belladonna (light) - 3612 blue
-Bellamosa (dark) ............. 3612 blue
une-Aug
June-Aug
June-Aug.
Sun, loose soil. lime. Cow Imanure.
-Pacific Hýbrids (See Specials, opp. page)

## DIANTHUS (Pinks)

-Barbatus (Sweet Wm.) -.... 2412 (note
-Plumarius (Pinks)-.............. 2410 mixed
-L. Silvè Mine $\qquad$ 128 white
-Old Spice (See Specials, this page)
-Scarlet Glow (See Specials)
DICENTRA (Bleeding-heart)
-Eximia --- (Foxglove)
-Hybrids, Shirley .
1410 rose
June-Aug.
June-Aug
June-Aug.
Red, white, pink. Single and double Lime, drain, sun.
Part shade. Drain. | Color-choice:Order pink, blue white or mixed. (Easy culture.

Drain. Tolerant.

606 various
June-A:
Sun or shade

## -Ambigua

 June-Aug.
## ERODIUM (Heronsbili)

-Chamaedroides roseum
3. 6 pink

May-Nov.
Drain, sun.
GEUM (See Specials, this page)

## GYPSOPHYLLA (Baby Breath)

-Repens Bodgeri
.is 8 white
June-Aug.
Lime, sun, drain.


## HARDY CARNATION

Dianthus Old Spice
Pat. 499. A Dianthus that looks and smells like a pink florists' carnation. Hardy. Blooms all summer, pink. 3 for \$1.50.

Dianthus Scarlet Glow 15-inch plant. Large, double salmon-scarlet blooms off and on all summer. 3 for \$1.50.

## SHOWY NEW GEUMS

Avens are among the showiest of bardy perennials from May to July. Good foliage. Sun, moisture in bot weather. Set 8 inches apart.
Fire Opal-Red, 18 inches high. Wilton Ruby-Double, scarlet.

Each kind 3. for \$1.50.

## IMPROVED BABY BREATH

Gypsophylla Bristol fairy Very dainty, many little blooms. 3 for \$1.65.

## CHRISTMAS ROSE

## Helleborus Niger

Tiny evergreen, with white blooms De. cember to March: $\$ 1.20$ each; 3 for \$3.25.

## HEMEROCALLIS

Flowers for
3 YELLOWS
3 ORANGE
3 PINK OR RED
3FRAGRANT
5 Months Collection of 3 for $\$ 2.55$ Collection of 3 for $\$ 2.6$

May-June
Pale Moon-Soft yellow, Dover - Large, clear or- Serenade-Crinkled pink Dr. Regal-(30") orance
* 60

June-July \{ D.D.Wyman-(36") Gol- Imperator-Rich orange. Bagdad-Copper-red on Mikado - Orange; red $\{$ den, tawny splashes .60 Star-shaped. (48").... . 75 orange. (42") .--......... 1.50 spotted. (36") ...- .-. . 95

July-Sept.


Iris Kaempferi


## IRIS ARISTOCRATS

Of thousands of named kinds, most catalogs list only the Tall Bearded. List below contains widest possible variations, only the best in each class. Different classes are enormously different in size, structure, time of bloom.

## Beardless Iris <br> (Moist, part shade, fertilize)

## Siberian Hybrids

June, 3 to 4 ft . Priced 70c each. 1 each of three kinds: $\$ 2.00$.

Caesar's Brother-Dark blue.
Heavenly Blue-New clear blue.
Snow Queen-Enormous white

## Kaempferi Hybrids

July, 2 to 4 ft . Largest iris. 3 of one kind $\$ 1.50$. 1 each of 4 kinds $\$ 2.25$. Gold Bound-White, fold center Mahogany-Double red, dark. Blue Bird-Fine blue. Single Red Riding Hood-Single red.

## Bearded Iris

(Dry, sunny, no manure)

## Ever-Bloomers

May. summer, autumn-3 flowering seasons. Fine show until late frost. All summer they burst into bloom anew. Cultivate and fertilize lightly between flowering periods
Souv. Lt. Chauvenac - $15^{\prime \prime}$ violet, 2 for 85 c .
Jean Siret-10" yellow. 2 for 70 c .

## Fall Bloomers

Bloom in spring and again in fall! $11 / 2$ to 2 ft . 2 of one kind for 85 c .
Sangreal-28" good yellow.
Black Magic-30" prolific dark blue.
Frost Queen-22" dependable white.


| UNIFORM PRICED | Inches |  |  |  | Special |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KINDS： 3 of one kind | s |  |  |  |  |
| \＄1．20（minimum） | ． 6 | $\begin{aligned} & \text { O. } \\ & 0 \\ & 0 \end{aligned}$ | \％ | of | Cultural |
| （12 of one kind \＄4．00） | 岃 | に | ט | Bloom | Notes |

## HELIANTHEMUM（Sun－rose）

－Buttercup

－Ben Ledi（new）
－Fireball
－Rhodanthum Carneum

66 yellow 66 crimson 66 scarlet 66 pink

HELIANTHUS（Perennial Sunflower）
－Loddon Gold ．－－．－．．．．．．．．．．．．．．．． 5014 yellow
HELIOPSIS（Specials，this page）
HELLEBORUS（Specials，page 19）
HEMEROCALLIS（Specials，opp．page）
HIBISCUS（Rose－Mallows）
－Giant Mixed ．－．．．．．．．．．．．．．．．．．．．． 3624 various July－Aug
HOSTA（Funkia or Plantain－Lily）
－Coerulea Lanceolata ．．．．．．．．． 1810 blue
－Lancifolia－．－．．．．．．．．．．．．．．．．．．．．．．．．． 2412 lilac
－Subcordata（Specials，next page）
IRIS（See specials，opp．page）
LIATRIS（Blazing Star）
－Pycnostacha $\qquad$ 488 purple
$\qquad$ －September Glory 6012 purple
LILIUM（See specials at right） LINUM（Perennial Flax）
－Alpinum $\qquad$
LYTHRUM（See specials at right）
MATRICARIA（Feverfew）


Carpet the ground in hot，dry，sun． Evergreen．Need no care．

Tolerant，showy．

Very tolerant．
July－Aug．\｛ Absolutely trouble July－Aug．$\left\{\begin{array}{l}\text { Aree．Sun or shade．}\end{array}\right.$

July－Aug． Sept．

S Sun or shade． Showy．

68 blue

## HELIOPSIS SUMMER GOD

Huge golden bloom，full sun，June to Sept．Very tolerant and showy 3 for $\$ 1.60$ ．


LILIES
Easy to grow in drained soil．Part shade belps but some sun needed．Set bulbs 6 inches deep．
Most lilies prefer fall planting．b．er these two do well in spreng．

Philippinense Formosa－3 ft．Aug．to frost．Huge，fragrant white blooms， emerald streaked inside and purple streaked outside．Gorgeous．No lime． 3 for $\$ 1.50$ ．
Regale－S ft．July．Tolerant，but sunny． Up to 2 dozen blooms on a stem，pink， white and yellow blend．Very fragrant． 3 for $\$ 1.50$ ．

## LOOSESTRIFE（Lythrum）

Morden＇s Pink Prolific Profuse spikes of rose－pink，June to Sept． Very tolerant．Height 2 ft ．，space 15 inches． 3 for $\$ 1.65$ ．

We offer 20 peonies－all double or semi－double－ which achieve nearly all the effects of the thousand or so named kinds．Each is high－rated by Amer． Peony Society（10．0 would be perfect）．Good 3－5 eye divisions．Sprouts start early，so order now． If set in deep，manured bed in sun will last for a gereration without any attention．


| 6 Weeks of Bloom | 5 WHITES <br> Collection for $\$ 7.00$ | 5 PINKS <br> Collection for $\$ 5.00$ | 5 REDS <br> Collection for $\$ 5.00$ | 5 YELLOWISH Collection for $\$ 6.00$ |
| :---: | :---: | :---: | :---: | :---: |
| Mid－Ma | $\left\{\begin{array}{l} \text { Le Cygne - } 9.9-\text { Fra- } \\ \text { grant huge ivory.... } \$ 3.00 \end{array}\right.$ | Mon．Jules Elie－ 9.2 － Fragrant pink ．－．－．．．．$\$ 1.00$ | $\begin{aligned} & \text { Richard Carvel - }-8.8 \text { - } \\ & \text { Brilliant crimson -... } 1.00 \end{aligned}$ | Duch．de Nemours－8．1－ White and yellow．．．$\$ 1.00$ |
| Late May | $\left\{\begin{array}{l} \text { Mont Blanc - 8.6-Lacy } \\ \text { milky, fragrant -.... } 1.00 \end{array}\right.$ | Rosette－8．8－Clear shell <br> pink $\qquad$ 1.00 | Wm．F．Turner－ 8.4 － Crimson，gold center 1.25 | Laura Dessert－ 8.8 － <br> Light lemon tone．．．．．． 1.50 |
| June | $\left\{\begin{array}{l}\text { Mrs．Ed．Harding－} 9.3- \\ \text { Prolific white ．．．．．．．．}\end{array}\right.$ | Therese－ $9.8-$ World＇s best pink ．．．．．．．．．．．．．．．．． 1.50 | Longfellow－9．0 -1.00 Bright crimson | Lucy Shaylor－9．0－Pale yellow center ．．．．．．．．．． 1.50 |
| Mid－June | $\left\{\begin{array}{l} \text { Mme. I. Dessert - } 9.4-\overline{1.0} \\ \text { Flesh white }-. . . . . . . ~ \end{array}\right.$ | Phyllis Kelway－ 9.0 － large，rose－pink．．．．．．．． 1.00 | Felix Crousse－ 8.4 － | Primevere－ 8.6 －White and sulphur ．．．－．．．．．．．． 1.50 |
| Late June | $\left\{\begin{array}{l}\text { Avalanche } \\ \text { Cr＇my white．} \overline{\text { Sh }} \text { howy } 1.00\end{array}\right.$ | Sarah Bernhardt－9．0－ Apple blossom ．．．．．．．． 1.00 | H．L．Richardson－8．5－ Bright red，fragrant．$\$ 1.50$ | Solange－9．7－Odd buff and cream ．．．．．．．．．．．．．．．． 1.00 |

# 4 Highest Rated Peonies $\$ 6.50$ （The best in each color） 

Kelway Glorious（white），Therese （pin），Longfellow（red），Solange（yel－ lowish．

## 2 Single Peonies $\$ 4.00$

King of England－High－rated＂Japan－ ese＂type．Rich carmine．．．．．．．．．．$\$ 1.25$ Helen－9．0－Tall and erect．Pure shell pink，exquisite．Early

Sprouts start growth so very early in spring it is often impos－ sible to dig safely．We reserve the right to hold orders placed now for August shipment．

GIANT PENSTEMON FIREBIRD
June to frost, large fiery scarlet flowers. 3 for \$1.35.

## ORIENTAL POPPIES

May-June, tolerant, water well.
Beauty of Livermore-Crimson, black blotches.
Gold of Ophir-Nearly gold. Mrs. Perry-Orange-apricot. Perry's White-Good white. Purity-Pure, unmarked pink.

All 5 kinds (one each) for $\$ 3.00$
Three of one kind for $\$ 1.50$.
Snowflame-(Pat. 365.) Half orange, half white. 75c each; 3 for $\$ 1.75$.

## WHITE PLANTAIN-LILY Subcordata grandiflora

The well-known white August-Lily. Grows anywhere. Wh bite in August. 3 for $\$ 1.75$; 12 for $\$ 6.50$.

## RUDBECKIA WHITE LUSTRE

 Creamy petals, with bronze center cone. Sturdy 3-ft. stems. Late June to September, and each flower lasts several weeks. Vigorous, insect-free, bardy. 75c each; 3 for $\$ 2.00$.| UNIFORM PRICED | Inches |  |  | Time |
| :--- | :---: | :---: | :---: | :---: |
| KINDS: 3 of one kind | 0 | Special |  |  |
| $\$ 1.20$ (minimum) | 苟 | $\stackrel{0}{0}$ | 0 | of |
| Cultural |  |  |  |  |

## PENSTEMON (Beard Tongue)

-Barbatus Pink Beauty...... 3010 pink June-Aug. Rich, drain, sun. -Firebird (See Specials at left)
PEONY (previous page)
PHLOX (Specials, below)
PHYSOSTEGIA (False Dragonhead)
-Rosy Spire


3612 rose $\begin{array}{cc}\text { Sept. } & \text { Sun, tolerant. } \\ \text { July-Aug. } & \text { Sun, tolerant. }\end{array}$

## PLATYCODON (Balloon Flower)

-Grandiflora 248 blue -Grandiflora alba ................. 248 white

June-Sept. \{ Sun, drain. Do June-Sept. \{ not disturb.
PAPAVER (See specials at left)
PLUMBAGO (Leadwort)

- Larpentae .--_-_-......... PRIMULA (Primrose)
-Veris, Munstead
. 128 blue
July-Sept.
Sun or shade.


## pULMONARIA (Lungwort)

-Angustifolia azurea ......... 1210 blue Apr. May
PYRETHRUM (Painted Daisy)
-Mixed
2415 orange May-June
Manure, sun.
RUDBECKIA (See specials at left)
SCABIOSA (see specials, opp. page) SEDUM (Stonecrop)

| -Sieboldi | 8 | 8 pink | Sept.$\quad$Trailing, showy. <br> Good color form. |
| :--- | :--- | :--- | :--- |

## HARDY PHLOX

There are getting to be so many hundreds of varieties that the following rigidly critical list will be helpful to many:

## Decussata (Summer Phlox)

July to October. Space 10 inches, sun, drained, fertilized. Never water foliage. Fine new kinds, any one kind-3 for $\$ 1.50 ; 12$ for $\$ 5.50$.

Augusta - (Pat. 252) - AmericanBeauty red.

Chas. H. Curtis-Sunset-red. Late.
Dr. Klemm-Light lavender, rich purple center.

Fairy King - Large, soft, laverider, disease-resistant.
Flash-Crimson with orange center Medium height, outstanding.
Mary Louise-The best and biggest white to date. Florets twice as big as any other white. Medium height.

Painted Lady - Delightful combination of silver-pink with salmon shading and cherry-red centers. Early.
Ruby Lee - Extra large plum-red flowers. Healthy vigorous growth; medium height.
Salmon Beauty (Eva Forster)-Rich salmon-pink with white eye. Beautiful.
Thor-Scarlet-salmon, red center.

## Subulata (Moss Pink)

A low spreading mat for full sun in drained soil. Bloom April and May. Any one kind-3 for $\$ 1.20$; $\$ 4.00$ per dozen.
Atropurpurea-Showy red.
Brightness-Attractive pink. Sampson-Deep rose, red center.

## Setacea (Cushion Phlox)

Compact, neater than subulata, blooms both spring and again heavily in Autumn! New. Sun, drain. 3 of one kind for $\$ 1.35$. Camla-Pure glistening pink.



Phlox decussata in July

## Divaricata (Native Phlox)

April to June, 10 -inch stems of lavender. Delights in shade. 3 for $\$ 1.20$; 12 for $\$ 4.00$.

## Suffruticosa (Early Phlox)

Sun, drain, space 10 inches.
Miss Lingard-The best early white known. June to October. 3 for $\$ 1.50$; 12 for $\$ 5.50$.


SUNNY PERENNIAL BORDER—Ten showy yet labor-saving, in-ect-free plants for such a position are:-Bearded Irss, Peonies, Thymus serpyllum, Asters in variety, Baptisia, Phlox, Physostegia, Teucrium and Veronica.

## UNIFORM PRICED KINDS: 3 of one kind $\$ 1.20$ (minimum) <br> ( 12 of one kind $\$ 4.00$ )

|  |
| :---: |
|  |  |

## STOKESIA (See specials at right)

## STATICE (Sea Lavender)

| -latifolia -.-------------------.--18 | 6 purple | July-Aug. | Sandy loam, sun. |
| :---: | :---: | :---: | :---: |
| TEUCRIUM (Germander) |  |  |  |
| -chamaedrys .-.---.-...-.-.-.---12 | 6 red | July | Sun, drain. |

THALICTRUM (See specials at right)
TRADESCANTIA (Spiderwort)

| -Blue Stone <br> -Pauline <br> -Purple Dom |
| :---: |
|  |  |
|  |  |


| 12 | 8 blue |
| :--- | :--- |
| 128 rose |  |
| 12 | 8 purple |

May-Oct.
May-Oct.
May-Nov. May-Nov.

TRITOMA (See specials at right)
TROLLIUS (Globe-flower)
-Europeus Hybrids
248 yellow
May-July
Moist, rich, humus.

## Valeriana (Garden Heliotrope)

-Coccinea .-.-a.-.-.-.-............... 2412 ros
-Coccinea Alba .................. 2412 white
VERBASCUM (See specials at right)
VERONICA (Speedwell)

-Rupana

- Incana
$\qquad$ 18 May-June
\{ Any garden soil. \{ Sun, drain.

VIOLA (Specialis below)

## SCABIOSA CAUCASICA

Attractive pin-cushion blooms on $11 / 2 \mathrm{f}^{*}$. stems, June-July. Sun and drain. Space 8 inches. Order either white or lilac. 3 for $\$ 1.50$.

## STOKESIA BLUE MOON

Light blue, 5-inch flowers June to November on stiff 18-inch stems. Hardy, insect free. 3 for $\$ 1.35$.

## THALICTRUM LAVENDER-MIST

Large pale-purple panicles from July to September. Sun or shade. Maidenhair leaves. 3 for $\$ 1.60$.

## NEW EARLY TRITOMAS

No longer stiff "Red-bot Pokers," but graceful, loose spikes in gay colors start. ing in June and lasting to frost. Any one kind 75 c each; 3 for $\$ 1.75$.
Golden Scepter-Hardy, 3 ft. saffronyellow spikes June-July. Fine with light blue Delphinium.
Primrose Beauty-Tall light yellow. Springtime (Pat. 318)-Upper spike is coral-red, lower balf is ivory.

## NEW PINK VERBASCUM

3 foot spikes June to Sept., drain. Old favorites ("Mullein"), new color.
Pink Domino - New, extra bealthy, rose-pink. Fine plant. \$1.35 for 3.

## Wild Flowers

Success with wild flowers is simply a matter of putting them in the soil, exposure and general climate to which they are accustomed. It is important to arrange gardens where associated plants are grouped, rather than try to make artificial differences of soil in the same bed. Coddling is apt to do more harm than good.

Note that ferns are particularly useful for they grow where most flowers will not - generally benefitting from at least light shade

| COMMON KINDS: <br> Each kind: 10 for $\$ 1.80$ <br> 50 one kind $\$ 5.00$ | $\begin{aligned} & \text { Time } \\ & \text { of } \\ & \text { Bloom } \end{aligned}$ | Special Cultural Notes |
| :---: | :---: | :---: |
| CALTHA (Marsh-Marigold) <br> C. palustris ................ 1510 yellow | May | Rich, damp. |
| CAMPANULA (Blue Bells) <br> C. Rapunculoides .-.... $30 \quad 12$ blue | Jul-Aug | Tolerant. |
| ERYTHRONIUM (Dogtooth Violet) <br> E. Americanum .......... 66 yellow | May | Drain, shade. |
| EUPATORIUM <br> E. ageratoides 3615 white | July | Semi-shade. |
| E. perfoliatum <br> (Bone-set) 3615 white | July | Low, rich. |
| HEPATICA (Liverleaf) <br> H. Acutiloba $\qquad$ 66 blush | April | Drain, shade. |
| IRIS (Blue Flag) <br> I. Versicolor $\qquad$ 2410 blue | June | Sun, damp. |
| LYSIMACHIA (Moneywort) <br> L. Nummularia ............ 68 yellow RUDBECKIA | Jun-Jul | Shady, damp. |
| R. hirta (Ox-eye <br> Daisy) $\qquad$ 3012 yellow | Jul-Aug | Tolerant. |
| SANGUINARIA (Blood-root) <br> S. Canadensis _-_ 63 white | April | Damp, shade. |
| THYMUS (Thyme) |  |  |
| T. Serpyilum .-..-...-..... 10 6 rose | Jun-Jul | Drain, sun. |



Moccasin Aower (Cypripedium Acaule)

## CHOICE SHOWY NATIVES

(These prefer early planting)

## Butterflyweed

Asclepias tuberosa - 18 inch. Orange in June-July. Sunny, well drained. 3 for $\$ 1.20$, 12 for $\$ 4.00$.

## Cardinal Flowers

Fiery 2 -foot spikes July-
August. Moist, part shade.
3 for $\$ 1.20,12$ for $\$ 4.00$.

## Lady's Slippers

Cypripedium - Orchids, hardy outdoors in moist, peaty shade. Bloom in May. 3 of any one kind for $\$ 1.20$ ( 3 each, 9 plants, for $\$ 3.25$ ).
Acaule-Dark rose Mocas$\sin$ Flower.
Pubescens - Large yellow Lady's Slipper.
Spectabile - The Showy
Pink Lady's Slipper.

## White Trillium

Trillium grandiflorum Large white in early May. Leaf-mold, part shade. 3 for $\$ 1.20,12$ for $\$ 4.00$.

## Virginia Bluebells

Mertensia virginica-Open a lovely blue in April. Any soil, but part shade best. 3 for $\$ 1.20,12$ for \$4.00.

## Caroline Lupine

Thermopsis caroliniana 3 ft . spikes of yellow peaflowers June-July. 3 for $\$ 1.20,12$ for $\$ 4.00$.

## White Bugbane

Cimcifuga racemosa-4 ft. spires of white July and August. Succeeds in shade $\$ 1.20$ for 3; $\$ 4.00$ for 12 .


## CHOICE FERNS

Each kind, $\$ 2.00$ for 10 ( $\$ 12.00$ per 100). Five each any three kinds for \$2.75.

Christmasfern (Polystichum) - $12^{\prime \prime}$ - dry, shade. Evergreen leaves sold for decoration.
Cliff-fern (Polypody) - $6^{\prime \prime}$ - evergreen, drain.
Hayscented Fern (Dunnstaedtia)-18"tolerant.
Maidenhair (Adiantum)-Rich, moist, but drained soil. Easily grown. Showy and popular.
Leather Woodfern (Dryopteris) - $18^{\prime \prime}-$ tolerant.
Toothed Woodfern-18"-also evergreen. Damp.
Sensitivefern (Onoclea) - shade, heavy, moist. 12".
Interrupted Fern (Osmunda)-60"-damp, sunny.
Cinnamonfern (Osmunda) - 60" - any moist soil.
Ostrich Fern (Pteretis nodulosa)-36"Very tolerant. This makes a delicious, nutritious asparagus substitute. Cut in "fiddlehead" stage (see photo left), wash well, boil 30 minutes, salt, serve like asparagus, 3 plants serve a small family. Available commercially in cans.

# Herbs 

The charm of old-fashioned gardens again in favor, herbs are being rediscovered as both useful and decorative. But the chief attraction of herb gardens is to the sense of smell.
Most herbs are exceedingly easy to grow in average soil, well drained and in full sun.

Most herbs should be used lightly in cooking - don't be heavyhanded. So used they add a spice and charm to food and drink that nothing else can. But dried commercial flavors are far inferior in quality to fresh leaves picked as needed for use in your own garden.


Photo: Lemon Balm, Creeping Thyme and Lavender in Herb garden.

## All Hardy Perennial Herbs Priced 3 of one kind \$1.20; 6 of one kind \$2.25

BALM, LEMON (Melissa officinalis)2 ft ., rich, moist, sun or part shade. Leaf scented like Lemon Verbena. In tea, or garnish.

BERGAMOT. BEE BALM (Monarda didyma)-3 ft. sun or shade. Fragrant leaves. Showy old fashioned salmon pink bloom.
Cambridge Scarlet-Brilliant scarlet.
BURNET (Sanguisorba canadensis)18 inch, good soil, sun or part shade. Cucumber-scented leaves for salad.

CATNIP (Nepeia cataria)-2 ft . full sun. Any soil. Lavender bloom, aromatic leaves.

CHIVES (Allium schoenoprasum) - 1 ft . Rich soil. The smallest, gentlest onion, Chopped leaves in salads, omelets, sauces.

COSTMARY (Chrysanthemum balsa-minta)-3 ft. Full sun. Yellow flowers, spicy narrow leaf. Reputed to repel moths.

GERMANDER (Teucrium chamaedrys) -l ft. Rosy bloom, dark shiny thickset leaves. An excellent clipped dwarf hedge. Tolerant.

HELIOTROPE, HARDY (Valeriana of-ficinalis)- 4 ft . Tolerant. Showy fragrant rose bloom in June-July.
HYSSOP (Hyssopus officinalis)-2 ft. Low compact, with deep blue flower spikes.
LAVENDER-COTTON (Santolina in-cana)- $11 / 2 \mathrm{ft}$. Full sun. Silvery evergreen leaf
Viridis-Rare green-leaved form.

LAVENDER (Lavandula veris)-18 in. Fragrant leaf and flower. Gather flower spikes when buds start opening. Dry and scent linens, etc.

Rosea-Silver pink form. 3 for $\$ 1.50$. Twickle—Purple form. 3 for $\$ 1.50$.

MARJORAM, POT (O. onites)-Similar, pink bloom. Better flavor, not quite so hardy.

MINT, APPLE (Mentha rotundifolia)Woody leaves, lavender flowers.

MINT, PENNYROYAL (M. puleqium)Low, spreading with pennyroyal fragrance.

MINT, PEPPERMINT (M. piperita) - 2 ft . True old-fashioned flavor for tea, candy or garnish.
Citrata-Orange mint flavor for summer drinks from crushed leaves.
MINT, SPEARMINT (M. spicata)-The one used for mint jelly to serve with lamb.

ROSEMARY (Rosmarinus officinalis)Must be wintered indoors except in south. Narrow spicy leaf delicious.
RUE (Ruta graveolens)-2 $1 / 2 \mathrm{ft}$. Yellow blooms, finely cut blue-green leaves. Handsome.

SAGE (Salvia offinicalis) - $21 / 2 \mathrm{ft}$. Sun. The form we offer is Holt's Mammoth. Gray pebbled leaf, purple flower. For flavoring meat.

SAVORY (Satureja montana) - 1 ft . Neat edger, stand sun, dry soil. Seasons meats, soups.

Kitchen Herb Collection: 3 each of eight kinds: Chives, Peppermint, Pot Marjoram, Rosemary, Savory, Tarragon, Sage and Thyme, 24 plants in all, for $\$ 9.25$.
Stepping-Stone Herb Collection: Five kinds suited to growing between flags. Spice the air when walked on; do not suffer from the trampling: White Creeping Thyme, Crimson Thyme, Caraway Thyme, Lemon Thyme and Pennyroyal Mint.

3 each, 15 plants, for $\$ 6.50$.
10 each, 50 plants, for $\$ 19.50$.

TARRAGON (Artemisia dracunculus) -2 ft. Narrow glossy leaf, aromatic. Flavor vinegar, fish, soup or salad. 3 for $\$ 1.65$.
THYME (Thymus vulgaris) - 1 ft . Sun, drain. Gray narrow leaf, purple flower. Used in poultry dressing.
THYME, CARAWAY (T. herba barona) -Creeper. Scented leaf flavors beef dishes.
THYME, CREEPING (T. serpyllum)Useful ground cover. Rosy bloom.
White-Form with white blooms.
Crimson-Form with crimson blooms.
THYME, LEMON (T. citriodorus) $-1 / 2 \mathrm{ft}$. Blue leaf with lemon flavor.

WOODRUFF (Asperula)
Sweet Woodruff (A. odorata) -Unusual ground cover for shade. Leaves scented like hay.
WORMWOOD (Artemisia pontica) 2 ft . Decorative gray lacey foliage.
Fringed (A. frigida)-1 ft. Dainty, silvery.
Southernwood, "Old Man" (A. abro-tanum)-Green leaves cut into thread -like lace.

Ghost Plant, "Silver King" (A, abula) —3 ft. Silver-white foliage, dried for winter.


Azalea Kaempferis Betty and Othello


Azalea ledifolia


Daphne Cneorum

ON the following five pages are arranged alphabetically the really showy, choice kinds. No plants in gardens are easier to take care of when once planted in really suitable sites. There is, indeed, little one can do to improve them at all-even were expense and labor limitless. But the broad evergreen leaf constantly transpires


Berberis Julianae



# Evergreens 

Much complication is made of soil needed for Broadleaf evergreens. It is really very simple: Those that need acid soil need little else. And any heavy mulch of humus will produce perfect conditions. Those that do not need acid soil are among the most tolerant of all known ornamental plants.

## Acid-Soil Broadleafs

Azaleas (all kinds) Calluna (all kinds) Daphne cneorum Erica carnea Ilex opaca varieties Kalmia latifolia Leucothoe catesbaei Pieris floribunda Pieris japonica Rnododendron (all kinds)

Neutral-Soil Broadleafs
Abelia
Berberis (all kinds)
Buxus (all kinds)
Cotoneaster (all kinds)
Ilex crenata varieties
Ilex glabra
Laurocerasus
Mahonia aquifolium
Pachistima canbyi
Pyracantha lalandi

## SMALL INEXPENSIVE GRADES GROW INTO SPECIMENS



Small plants safe without B \& B (left) Azalea (right) Rhododendron

7. Pieris japonica 8. $\begin{array}{r}\text { Leucothoe } \\ \text { 9. Kalmia }\end{array}$


1. Maximum
2. Carolina.

ILEX-
4. Crenata.

WITH BALL
No fertilizer-little or no pruning. Mulch with leaves after planting. Water well.



Keep planes pacted,
moist. Talie out on


Year-'Round Beauty from Evergreen Shrubs

## DWARFS <br> $$
\begin{aligned} & x=\text { flower } \\ & 0=\text { fruit } \\ & O \end{aligned}
$$

Azalea kurumes.
Azalea macrantha
Azalea macrantha......
Calluna (Heather)...
Cotoneaster horizontalis.
Cotoneaster microphylia
Daphne cneorum.. Erica carnea

## LARGER SHRUBS

Abelia grandiflora
Azalea arnoldiana
Azalea Gables.
Azalea ledifolia
Cotoneaster salicifolia
Kalmia latifolia
Leucothoe catesbaei
Magnolia glauca...
Magnolia glauca......
Pieris floribunda..
Pieris japonica.......
Pyracantha lalandi.
Yracantia lalandi....

## Broadleaf Evergreens (Alphabetical List)



Abelia Grandifora


Abelia Grandiflora (Glossy Abelia) 5 ft . Zone V, evergreen to Zone VI. Almost perfect shrub. Small bright leaves, graceful growth. Any soil. Sun. Pinky-white bells from June to October. Leaves bronze in winter. * 8 to 12 in................... $3.00 \quad 20.00$ | 15 | to 18 | 18 | in. $B \& B$ | $\ldots .00$ |
| :--- | :--- | :--- | :--- | :--- |

Ed. Goucher (Pink Abelia)-5 ft. Zone VI. More evergreen than above. Flowers twice as large and strong, clear pink, June to October.

30.00

AZALEAS-Here are listed both evergreen and deciduous together. Culture same as Rhododendrons.


Azalea Amoena (See A. obtusa)
-Ârborescens (Tree Azalea)—15 ft. Shade, acid, humus, loose. White in June. Fragrant. Zone V.

* 12 to 15 in...---------- ...... 5.50
40.00

18 to 24 in. B\&B.... $2.75 \quad 25.00 \quad 195.00$
-Arnoldiana (Amoena x Kaempferi) 6 ft. Bushy. Sun, acid, humus, loose. May. Zone V. A new hybrid race. Very dense and bushy shrubs.
——Early Dawn. Soft radiant pink.
——Mello-Glo-Cerise, suffused gold.
-Mossieana-Rich orchid. Vigorous.
Each above named kind:
*2-year XX ......-...... ....... $6.50 \quad 50.00$ *3-year XX ...------... ...--. $8.50 \quad 75.00$

- -Mixed, our selection only:-

15 to 18 in. B\&B ---- .----- 25.00200 .00
-Calendulacea (Flame Azalea) - 10 ft. Bushy. Åcid, humus, loose. Yellow to red in June. Zone V .

* 12 to 15 in. B\&B.... ....-- $8.50 \quad 70.00$ 18 to 24 in. B\&B.-.- $2.75 \quad 25.00 \quad 195.00$
-Ghent Hybrids (Gandavensis) - 5 ft . Acid humus. May. Zone V. Prices on request.

——Mixed Kaempleri Hybrids:
12 to 15 in. B\&B_....... 23.00
195.00
-Kirishima (Damask Rose) - Rare dwarf ( 6 ft .). Zone VI. Large blooms in May, white with pink center. Very showy and satisfactory. Rare hybrid.
*2-inch pots ............. ...... $3.00 \quad 27.50$ 18 to 24 in. B\&B_--. $4.50 \quad 40.00 \quad 350.00$


## Gable's Hardy Hybrid Azaleas

These hybrids have been made in the effort to originate a hardier strain of the Japanese type of Azalea in better form and color. All have lived and flowered in the open field with temperatures of twenty below zero in the last few winters with only negligible injury to a few. We offer 10 choice kinds all hardy up to Zone V:-

Billy. Bright red, single flowers.
Boudoir. $3 \mathrm{ft} .$, dense, broad. Foliage hid under large blooms, watermelon pink.
Corsage. 4 ft. Broad bush. Single large orchids almost cover bush.

Elizabeth Gable. 5 ft . The best evergreen. Late rose. (In this one variety only, we offer larger plants: 8 to 10 inch $B \& B \$ 2.50 ; 12$ to 15 inch $B \& B \$ 5.00$ each).

Mildred Mae. 3 ft . Broad, shapely. Early lavender, spotted red. Evergreen.

Old Faithful. 6 ft . Early, deep orchid. Vigorous. Regular bloomer.

Royalty. $21 / 2 \mathrm{ft}$. Compact evergreen. Bright purple, double.
PRICE: 5 plants, 2 years old, twice transplanted, assorted your selection, for $\$ 6.00$ (25 or more @ $\$ 1.00$ each).


Photo above is Caroline Gable—a gay showy vigorous azalea

Detail of Elizabeth Gable flower. Large, light rose-pink.


[^2]

AZALEAS: 1, 2—Kaempferi Hybrids; 3 Maxwell's 4 Mollis; 5 Hinodigiri; 6 Ledifolia; 7 Schlippenbachi
 2 to 4 ft. Acid, humus, various in May. Many tender sorts on request besides hardy ones listed.

- -amoena-Almost a species. Type is rosy purple. Hardy. Zone V.
8 to 10 in. B\&B.... $1.90 \quad 17.50 \quad 150.00$ 15 to $18 \mathrm{in} . \mathrm{B} \& \mathrm{~B} \ldots . . .3 .75 \quad 33.00 \quad 300.00$
-     - carminata splendens - Deep pink. Zone VI. Very fine.
8 to $10 \mathrm{in} . \mathrm{B} \& \mathrm{~B} . . . .2 .25 \quad 18.00 \quad 150.00$ 12 to 15 in. B\&B...- 2.7525 .00
- -coccinea-Brings the hardy Amoena strain into the fiery reds. New. Zone V.
*2-inch pots ............ ...... $3.00 \quad 25.00$ 10 to 12 in. B\&B.... 2.2519 .00
- -Hinodigiri-Brilliant scarlet. Zone VI. Completely covered with flowers so no leaf can be seen.
6 to 8 in. B\&B.... $1.75 \quad 15.00 \quad 120.00$ 8 to 10 in. B\&B.... $2.00 \quad 17.50 \quad 150.00$
- -Hino-crimson-Zone V. Large,
showy crimson-red, clean color, and
does not fade. Slightly hardier and
more vigorous than Hinodigiri which
it otherwise resembles.
* 4 to 6 in..
15.00
10 to 12 in. B\&B...- $5.00 \quad 45.00$
12 to 15 in. B\&B.... $7.00 \quad 60.00$
- -Hinomayo-Clear pink. Zone VI.
*2-inch pots ............. ...... $3.00 \quad 25.00$
12 to 15 in. B\&B_... $2.75 \quad 23.00$
——Yayegiri — Salmon-red. Narrow leaves. Showy. Zone VI.
*3-year XX

Azalea Ledifolia (Mucronatum). Evergreen. 6 ft . Bushy. Acid, humus, loose. White in late May. Zone V', VI. Also called "Indica alba."
——Alba-White.
6 to 8 in. B\&B.... $1.75 \quad 15.00 \quad 120.00$ 15 to 18 in. $B \& B$.... $5.00 \quad 47.50$

- Rosea (Magnifica) -Rose flowers. *3-year XX ............ ...... $8.50 \quad 75.00$ 15 to 18 in. B\&B.... $3.75 \quad 35.00 \quad 295.00$
-Macrantha (Indicum)-Evergreen. 3 ft . Dense. Acid, loose. Red in June. Zone V.
- Beni Kirishima-Large pink.
——J. T. Lovett—Prolific salmon-red.
- -Flora plena-Double salmon.
--Macrantha-Salmon-red.
——Macrantha (78380)—Late, salmon. Each of above kind:-
*3-year XX ............. ...... $8.50 \quad 75.00$ 15 to 18 in. B\&B.... $3.75 \quad 35.00 \quad 295.00$
-Maxwelli-Evergreen. 3 ft . Spreads. Carmine in late May. Zone VI Striking, hardy, evergreen Azalea. *3-year XX
$8.50 \quad 75.00$
-Mollis (Chinese Azalea)-2 to 5 ft . Sun, acid, loose. Yellow to red in May. Zone V. Easy to grow. The largest blooms of any, and striking colors. Winter effect somewhat bare. *2-year X ................. ....... $3.50 \quad 27.50$ 15 to 18 in. B\&B.... $5.00 \quad 45.00$
-Nudiflora (Pinxterbloom) - 6 ft . Acid, humus, loose. Pinkish or white in late May. Zone IV. Fragrant.
*12 to 15 in. B\&B.... 18 to 24 in. B\&B $\quad 2.75 \quad 25.00 \quad 195.00$

Azalea Poukhanense (Yedoense var.) 4 ft . Acid, humus, loose. Purplish in May. Zone V. Fragrant. 12 to 15 in. B\&B.$- .2 .50 \quad 23.00 \quad 195.00$ 18 to $24 \mathrm{in} . \mathrm{B} \& \mathrm{~B}-. .4 .50 \quad 42.00 \quad 350.00$

- Yodogawa - Garden form, large double flowers bright lilac. Semievergreen.
18 to 24 in. B\&B.... $4.00 \quad 30.00$
-Roseum (Downy Pinxterbloom)-12 ft. Any soil. Pink in late May. Hardy. Zone III. Native. Fragrant. * 4 to 8 in. X........ ...... 3.7530 .00 12 to 18 in. B\&B.... $2.50 \quad 17.50$
-Schlippenbachi (Royal Azalea)-12 ft . Thin shade, acid, humus. Clear pink in May. Fragrant. Zone V. * 6 to 10 in. X........ ....... 5.2542 .50
-Viscosa (Swamp Azalea) - 8 ft . Acid humus, swampy or dry. Very fragrant white in July. Zone VI. Ideal for bordering natural ponds - feet awash.
* 12 to 15 in. B\&B.... ...... $8.50 \quad 75.00$ 18 to 24 in. B\&B.... $2.75 \quad 25.00 \quad 195.00$



Pachysandra on a shady bank. No mowing.

## BERBERIS

Both kinds listed here are resistant to wheat rust. See Page 38 for deciduous kinds.
Berberis Juliana (Wintergreen Barberry) - 6 ft . Zone V. Evergreen. Sun or shade. Flowers small, fruit black. Hardiest of thoroughly evergreen Barberries. Good stout bush. Thorny. $\begin{array}{llll}12 & \text { to } 18 & \mathrm{in} . \mathrm{B} \& \mathrm{~B}_{-}-{ }^{2} 2.25 \quad 17.50 \quad 150.00\end{array}$
--nana-Neater, dwarf form of above. Excellent.
4 to 6 in. X
12 to 18 in B\&B $\quad 2 . \quad 3.50 \quad 27.50$
24 to 30 in $\mathrm{B} \& \mathrm{~B}-5.50$ 17.0U 150.00

## BUXUS

Buxus microphylla Koreana (Korean Box)- $11 / 2 \mathrm{ft}$. Zone V. Very compact and dense. Any soil. Prefers sun. Neat edge for a garden. Winter leaves light green.
8 to 10 in . X .
$4.50 \quad 37.50$
-compacta (Kingsville Box)-New rare, extremely dwarf. Hardy. Zone V. having gone through winters in Pocono Mts. Dwarfest of all Boxwoods, for edgings, etc. After 28 years, only 12 inches high, 21 inches wide.
*2 inch pots
(light)
$\$ 6.50 \$ 50.00$
*2 inch pots
(heavy)
$12.00 \quad 80.00$
4 to 6 in. wide
and high .-.-.-.. $2.00 \quad 15.00 \quad 135.00$ 8 to 10 in . wide and high -------- $4.00 \quad 35.00 \quad 300.00$
-sempervirens (Bush, Common Box) 10 ft . Zone VI. Quicker growth and more open than its famous variety * 8 to 10 in . X 15 to 18 in. B\&B-... $2.25 \quad 17.50 \quad 150.00$
——suffruticosa (Dwarf, Old English) 6 ft . Zone VI. A billowy dense mass of dark green. This is the box of collectors. Small plants used for real box edging. Ảny soil. Sun or part shade. Splendid dense, dark effect.

* 6 to 8 in. XX .......-. $5.50 \quad 45.00$ 18 inches B\&B---- $7.00 \quad 70.00 \quad 600.00$ 24 inches $B \& B-\ldots-.-24.00220 .001900 .00$


## CALLUNA

Calluna vulgaris (Scotch Heather) 2 ft . Zone V. Likes drainage, acid, wind. Evergreen. Rosv-purple, July and August.
—alba (white Heather) -Early
-alba erecta-Taller form, white.
-alba minor-Dwarf form of white.
-alporti-Crimson, tall.
-aurea-Yellow leaf, pink flower.
-hammondi-Robust growth. White.
-rosea-Pink, delicate form.
-rubra (Red Heather)-Good. Red.
-searlii-Tall, late white. Loose
Each of above nine varieties:
*21/4-in. pots ......... ...... $3.00 \quad 22.50$ 3-year clumps ---- $1.25 \quad 9.50 \quad 85.00$

## COTONEASTER

Culture: Sun, well-drained. Tolerant
Cotoneaster apiculata (Cranberry Cotoneaster) - 5 ft . Zone V. Pink blooms, June. Large red fruit. October.
12 to 15 in. B\&B...- $3.25 \quad 27.00 \quad 250.00$
-horizontalis (Rock Cotoneaster)-3 ft. Zone V. Flat arching, densely twigged branches, half-evergreen. Pink flowers, scarlet berries. Semi-evergreen.
3-inch pots $\qquad$ $4.50 \quad 37.50$ $\begin{array}{llll}12 \text { to } 15 \text { in. (pot).. } & 20.00 & 175.00 \\ 18 \text { to } 24 \text { in. B\&B } & 4.00 & 37.50 & 295.00\end{array}$
--perpusilla (Dwarf) - Neater and hardy to Zone V. A better shrub. 4 -inch pots ..--...... $1.5013 .00 \quad 115.00$
-microphylla (Rockspray)-3 ft. Zone V. Evergreen. Tiny leaves, dense growth. Scarlet fruit.
*2-inch pots ..........-- .....- $3.00 \quad 25.00$ 12 to 15 in. B\&B...- $2.50 \quad 23.00 \quad 195.00$
-—cochleata-Prostrate form, showy leaf and berry.
*2-inch pots
$3.00 \quad 25.00$
—salicifolia (Willow-leaf)-8 ft. Zone V. Evergreen. Tiny leaves, dense bronze winter leaves.
2 to 3 ft . B\&B.-....- $3.50 \quad 28.50 \quad 250.00$

Laurocerasus in bloom.

## DAPHNE

Daphne cneorum (Garland Flowers)1 ft . Zone V. Perhaps the finest rockgarden evergreen. Very fragrant rose flowers (large) in May and again in September. Needs sun. Spreads. Our special strain tends to bloom through the summer. Makes a foot-high mat of gray-green, topped with flowers. One of the choicest small shrubs.

* 5 to 7 in. B\&B.. ..--. $\$ 12.00 \$ 90.00$ 6 to 9 in. B\&B.. $\$ 1.60 \quad 15.00 \quad 120.00$ 8 to 12 in. B\&B.. $1.90 \quad 18.50 \quad 170.00$ 12 to 15 in. B\&B.. 2.5023 .00


## ERICA

Erica carnea (Spring Heath) - 1 ft Zone V. A show of rose in the snow, lasts to May. Acid, sandy, humus A soft mass of tiny leaves.
3 -year clumps --.-\$1.25 \$ $9.50 \$ 85.00$

## EUONYMUS

Euonymus fortunei radicans (Winter-creeper)-20 ft. Vine, self-clinging Zone V. Evergreen. Dainty clean leaves.

- coloratus-Rosy-purple leaves.

> * 12 to 18 in. X
> $4.00 \quad 35.00$
> 15 to 18 in....-.-........ $95 \quad 8.00 \quad 60.00$
——kewensis-Tiny dwarf Vine.
5-in. pots .............. $95 \quad 8.50 \quad 65.00$

- -vegetus-Large leaves, vigorous bush. A few climbing leaders Orange fruit.
15 to 18 in.............. $1.25 \quad 11.00 \quad 95.00$


## HEDERA

Hedera helix (English Ivy) - 60 ft . Vine Apt to discolor in winter north of VI, though hardy. Self-clinging. Any soil.
$21 / 4$-in. pots
2.75
20.00

- -Baltica (Baltic) - Smaller leaf. Fully hardy in Zone V. The best.
3 -in. pots
$6.50 \quad 40.00$


Ilex aquifolium pyramidalis (English Holly-hardy form)-25 ft. Zone VI. Familiar Christmas evergreen. This is a handsome, hardy grafted female.

> Prices on request.
-crenata (Japanese Holly) - 18 ft. Zone V. Showy only for evergreen leaf and thickset, cross-branched shape. Tolerant. Slow-growing. 18 to 24 in. B\&B_-.- $2.75 \quad 23.00 \quad 195.00$
——convexa (Box-leaf)-4 ft. Dwarf with shiny round evergreen leaf. This is a gorgeous, gleaming leaf. The shrub might substitute as hardy dwarf box.
*21/4-in. pots $\qquad$ 15 to 18 in. B\&B.... $4.00 \quad 37.50$
45.00
-glabra (Ink-berry)-6 ft. Zone V. Evergreen, loose bush. Tolerant even in cities. The leaf is dull; the plant only good for background or massing.
*12 to 18 in. X.-.-.-.- ...-.- $5.50 \quad 47.50$ 18 to 24 in. $B \& B \ldots 2.25 \quad 20.00 \quad 160.00$
-opaca (American Holly) - 40 ft . Zone V. Damp, some shade. Red berries, dull, evergreen laf. Only females have berries. We offer:

- Males-you need one with your females, for most berries.
3 to 4 ft . B\&B........ $\$ 4.00 \$ 35.00$
- Females (grafts and cuttings):
${ }^{*} 6$ to 8 in. (pots).. 2 to $3 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \ldots . .3 .50 \quad 30.00 \quad 250.00$ 3 to 4 ft . B\&B.-.- $4.50 \quad 37.50 \quad 300.00$ 5 to $6 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} .-. \quad 7.00 \quad 65.00 \quad 600.00$
- Croonenburg-New form with still larger berries, though no larger clusters. Young plants bear, and so freely they weigh down the bush. Prices on request.


Right: Ilex opaca

Ilex Xanthocarpa-An Opaca with yel-
low berries, instead of red.
2 to 3 ft . B\&B...- 4.5040 .00
-Pernyi-10 ft., slowly. Zone V. Tiny leaves, large red berries. Fine, evergren dwarf.
Sold out.
-Verticillata (Page 39).

## KALMIA

Kalmia latifolia (Mountain Laurel)-8 ft . Zone IV. The best evergreen shrub in the north. Compact, with firm thick leaves. A show of pinky white in June. Acid, humus, damp, loose soil. (See also page 32.)

* 12 to 15 in. B\&B .... ...... $8.50 \quad 70.00$

18 to 24 in. B\&B.-.- $2.75 \quad 25.00 \quad 195.00$

## LAUROCERASUS

Laurocerasus schipkaensis (Hardy English Laurel)-6 ft. Zone V. A gorgeous evergreen shrub, with dark green leaves. White flower spikes in May. Very easily grown.

* 2-in. pots .....-....... ...-.. $3.50 \quad 27.50$

12 to 15 in. B\&B..-- .-.--- $20.00 \quad 175.00$

## leucothoe

Leucothoe catesbaei (Drooping Leu-cothoe)-4 ft. Zone V. Evergreen with large leaves, bronzed and purpled in winter. Acid, humus, shade. White, fragrant, May. (See also page 32)
*12 to 15 in. B\&B.... ....-- $8.50 \quad 70.00$ 18 to 24 in. B\&B.-. $2.75 \quad 25.00 \quad 195.00$

## MAHONIA

Mahonia aquifolium (Oregon Holly-grape)-5 ft. Zone V. Holly-like evergreen leaf. Yellow in May, purplish "grape" in August. Dry, part shade.
15 to 18 in. B\&B.... $3.25 \quad 28.00 \quad 250.00$

## PACHISTIMA

Pachistima canbyi-Evergreen clump, 9-inch. Zone V. Wonderful rock plant. Moist.
3-inch pots ......... $85 \quad 7.50 \quad 65.00$

## PACHYSANDRA

Pachysandra terminalis - Evergreen, fast spreading low plant. Shade. Tolerant in poor soil. Zone V. Plant 3 to 1 square ft . The best ground cover in shade.

| *Rooted cuttings | .. | ...... |  | 7. |
| :--- | :--- | :--- | ---: | ---: |
| Pot- | 7.50 |  |  |  |

Pot-grown 3-yr..... ....-. 2.7525 .00

## PIERIS

Pieris Floribunda (Mountain Fetter-bush)-3 ft. Zone V. Evergreen, spreading mound. Upright clusters of wax-white flowers in May. Acid, humus, half shade. Good native dwarf.
12 to 15 in. B\&B $-\ldots 3.00 \quad 28.00 \quad 240.00$ 18 to 24 in. B\&B--- $5.00 \quad 40.00$
-Japonica (Japanese Andromeda)-6 ft. Zone V. Evergreen, upright shrub, with drooping wax-white bells, May. New growth is rosywine.
10 to 12 in . B\&B $\quad .-\ldots . .25 .00 \quad 225.00$
15 to 18 in. B\&B... 3.5030 .00
24 to 30 in. B\&B.... $6.00 \quad 50.00$

## Photo: Pieris floribunda (low) and Japonica (tall)

## PYRACANTHA

Pyracantha Lalandi (Laland Firethorn) -Evergreen shrub to 15 ft . Zone VI. A fuzz of white in May and then orange-red berries in profusion, lasting to January. Drain, lime.
*4-in. pots .................... $10.00 \quad 85.00$ 15 to 18 in . B\&B.. $4.00 \quad 30.00 \quad 275.00$

## VINCA

Vinca Minor (Myrtle)—Prostrate. Zone V. Evergreen ground cover with pretty blue flowers in May. Shade; or if sun, then moist.
Strong clumps ... ...... $2.50 \quad 12.00$
-Bowle's variety - Neater growth, larger, bluer flowers all summer. Sold out.

## RHODODENDRONS

Evergreen shrubs with fine foliage. Range from dwarfs to giants. Bloom from May to July. All Colors. Soil: Acid, moist, loose, humus.

Culture-The roots feed at the surface -do not hoe or rake. Plant them properly and thereafter water and mulch as needed. Light shade, airy and open, gives best results. Only certain trees will do. The best are Oaks, Cherries, Magnolias and Birch.

Rhododendron Carolina - 8 to 10 ft . Fine native with light to deep pink bloom in May. Zone V.
18 to $24 \mathrm{in} . \mathrm{B} \& \mathrm{~B} \ldots . . .5 .00 \quad 47.50$
-Catawbiense-6 to 8 ft . Compact, rosy purple bloom in June. Zone V. 18 to 24 in . B\&B.... $5.00 \quad 47.50$
-Maximum-12 ft. Blush-white. July. Rapid and bushy with large showy leaves. Suitable for mass effects. Zone IV.
18 to 24 in. B\&B.... 4.5042 .50

## Hybrid Rhododendrons

We regret for the first time since 1878 we are unable to offer named kinds.
-Hybrid seedlings - These have as fine foliage as named hybrids, but not so many flowers nor such clear color. Fine for showy massed effects. Extra hardy. Mixed colors:
6 to 8 in............. $9.00 \quad 80.00$ 15 to 18 in. B\&B.... $6.00 \quad 50.00$
-Wilsoni-4-5 ft., slow neat bush. Light pink in June. Tolerant. Handsome leaf. Zone V. Dwarł native hybrid. Rare.
12 to $15 \mathrm{in} . \mathrm{B} \& \mathrm{~B}$.... $3.50 \quad 32.00$
15 to 18 in. B\&B.... $4.50 \quad 42.50$

YOUNG NATIVE ARISTOCRATS

## Rhododendrons for as low as $\mathbf{2 5 c}$

Not nursery-grown, like other items in this Guide, but collected with special precautions. We find all three sizes handle safely this way. See guarantee on page 3.

Young Native Aristocrats Grow Quickly



## SIZE 1: AS SMALL AS CAN BE SHIPPED SAFELY. 12 to 15 in . (Ball) Plans-l to 3 Stem.

This special "Young Aristocrat" grade measures 12 to 15 inches with a small ball, weighing one or two pounds only. This stock is not to be compared for a minute with ordinary collected plants. It is on the contrary all carefully dug, the greatest pains being taken to preserve the roots. Carefully packed, it is easily planted and makes a quick start. Shipped from North Carolina, yet express runs only about 6 c each (in 100 lots).

| Rhododendron | (10) | (25) | (100) |
| :---: | :---: | :---: | :---: |
| maximum | \$5.00 | \$10.00 | \$25.00 |
| carolina .- | 6.00 | 12.00 | 40.00 |
| catawbiense | 6.00 | 12.00 | 40.00 |
| Azaleas |  |  |  |
| calendulacea | 5.50 | 11.00 | 35.00 |
| arborescens | 5.50 | 11.00 | 40.00 |
| viscosa | 5.50 | 11.00 | 35.00 |
| Nudiflora | 5.50 | 11.00 | 40.00 |
| Leucothoe |  |  |  |
| Kalmia (Mountain Laurel) |  |  |  |
| latifolia | 5.00 | 10.00 | 30.00 |

SIZE 2: AS SMALL A PLANT AS LOOKS SHAPELY. 12 to 15 in. B\&B Clumps, 4 to 6 Stems.

| These might be called | Az | ) | (100) |
| :---: | :---: | :---: | :---: |
| pecimens." The ball weighs | Calendulacaea ..-.-.- \$8.50 | \$19.00 | \$70.00 |
| out 5 pounds per plant, indidually burlapped. They are 2 | Kalmia (Mountain Laurel) <br> Latifolia $\qquad$ 8.50 | 9.00 | 70.00 |
| ars older than Size 1. Exess runs about 20 cents per | Leucothoe (Fetterbush) <br> Catesbaei $\qquad$ 10.00 | 23.5 | 90.00 |
| ant. You can expect some | Rhododendron |  |  |
|  | Carolina .--------........... 10. | 23.50 | 00 |
| " the day they are plant | Catawbiense -.-.-.-......10.00 | 23.50 | 90.00 |
| ing" the day they are plante | Maximum ----------.-...- 8.50 | 19.00 | 70.0 |

SIZE 3: BUSHY, HEAVY CLUMPS $11 / 2$ to 2 FEET B\&B.
Any five for $\$ 12.50$, your selection from the above 6 kinds (all of the kinds offered in "size 2", next above). Additional at $\$ 2.25$ each. Express about $\$ 4.00$ for the 5 . These are suitable for immediate showy use.

Six Best Native

## Aristocrats in Color

In the Great Smokies, so high up winters are like New England, grow some of the handsomest natural evergreen shrubs in the world. We offer the six best in three sizes on previous page. All take acid, humus, loose soil.


Kalmia IMt. Laurell Late May


Rhododendron maximum (July)
Leucoîhoe Catesbaei (April)



Azalea calendulacea (May)
Rhododendron catawbiense (June)

## PART III

THESE plants are really shrubs that climb and are planted just like shrubs (see page 37). Only deciduous kinds are here listed for evergreen vines see under Broadleaf evergreens, page 30 to 32 . They vary greatly in climbing methods: twiners must have a lattice or other support, clingers climb on rough surfaces like stone, while rooting kinds cling to brick or even smooth wood.

## CLIMBING HABITS

Need tying: Clematis, Jasminum, Lycium.
Twining-(need support): Actinidia, Akebia, Aristolochia, Celastrus, Lonicera, Polygonum, Vitis, Wisteria.
Clinging-(rough surface): Ampelopsis, Schizophragma.
Rooting - (adhesive): Campsis, Hydrangea, Parthenocissus.

## ACTINIDIA

Actinidia Arguta (Virgin's Bower). Tall climbing. Zone IV. Vigorous, dense leaves. Small white flowers in July. Very free from disease. Sun or shade Fruit 1 inch long, like figs, edible. Interesting and useful vine.
2 -year
$.90 \quad 8.50$

## AKEBIA

Akebia Quinata (Five-leaf Akebia)Zone V vine. Handsome purple bloom in May. Sun. Drain.
2-year
$.95 \quad 7.50$

## AMPELOPSIS

Ampelopsis Brevipedunculata Maxi-mowiczi-Vigorous. Zone IV. Showy bright blue berries, Sept.-Oct. Called "Porcelain Ampelopsis." This is the deeply lobed variety, smooth leaves. Tolerant.
2-year $\qquad$ 1.00
8.00
-quinquefolia
-tricuspidata
see under
Parthenocissus

## ARISTOLOCHIA

Aristolochia Sipho (Dutchman's Pipe). Vine to 30 ft . Odd, large yellow and brown flowers in May. Large leaves. Vigorous. Tolerant. 2-year (pot) …

## CAMPSIS

## "BIGNONIA"

Campsis radicans (Trumpet Vine)- 60 ft. Vine. Zone V. Scarlet flowers, July to Sept. Prefers humus. Trained on a post, covers it quickly and seems like a small tree.

* 12 to 18 in $\qquad$ $.65 \quad 5.00$
12.00

2-year
.
5.00
40.00
-grandiflora (Chinese Trumpet-vine) 30 ft . Neater and showier. Zone (VI) VII. Blooms young.

3 -year $\qquad$ $\begin{array}{ll}1: 15 & 9.00\end{array}$

## CELASTRUS

Celastrus Orbiculatus (Oriental Bitter-sweet)-30 ft. Vine. Zone V. Brilliant red and yellow fruit in autumn. Vigorous.
12 to 18 in................. ....... 9.00
2-year ‥--
--Scandens (American Bittersweet)20 ft . Zone IV. Similar, but more dwarf. Easily grown. Note-only females bear berries. Plant several together to be sure.

* 12 to 18 in.
9.00

2-year
$.75 \quad 6.00$
45.00

## CLEMATIS

Clematis Hybrids- 8 ft . Zone V. Bloom through July and August. Light loam, manure, drain well. Do not prune much. Sun.
-Henryi-Showy white
-Jackmanni-Popular rich violet.
-Mme. Andre-Bright crimson-pink.
-Ramona-Lavender-blue, late.
Anyone of above kinds:

$$
2 \text {-year ..................... } 1.50 \quad 12.50
$$

-Paniculata (Sweet Autumn Clema-tis)-25 ft. Zone V. Woody and vigorous. Fragrant White, Sept.-Oct. 2-year
$\begin{array}{lll}85 & 7.00 & 55.00\end{array}$

## HYDRANGEA

Hydrangea Petiolaris (Climbing Hy-drangea)- 35 ft . Vine. Zone III. Selfclimbing. Handsome white show in June.
4-inch pots ......... $1.50 \quad 13.50$

## JASMINUM

Jasminum Stephanese (Hybrid Jas-mine)-2 20 ft . Vine. Zone VI. Pink, fragrant, May.
12 to 18 in.
$5.00 \quad 40.00$
-Nudiflorum (Winter Jasmine)-15 ft. Zone V. Bright yellow, Feb, to April. Tolerant.
12 to 18 in.-- .-.......... $5.00 \quad 40.00$

## EUONYMUS

(see page 30)
HEDERA
(see page 30)
PACHYSANDRA (see page 31)
VINCA
(see page 32)

[^3]


## $\stackrel{(\text { Each }) ~(10) ~}{\boldsymbol{( 1 0 0 )}}$ WISTERIA

Wisteria floribunda (Long-cluster Wis-teria)-25 ft. Vine. Zone V. Fragrant purple clusters three feet long. May and June. Humus, drain, sun

$$
\begin{array}{lll}
3 \text {-year grafts .-.-...- } 2.25 & 19.00
\end{array}
$$

--naga noda-Clusters of sensational length. Up to 5 ft . Purple. 3 -year grafts ........ $2.25 \quad 19.00$

- -rosea-Pink blooms,
3 -year grafts ........ $2.25 \quad 19.00$
- -praecox (Issai)—20 ft. Zone V Long blue clusters start when plant is only 2 or 3 years old. Tolerant. A sensational new vine. Very different from other floribundas. 3 -year grafts .--..... $2.50 \quad 20.00$
-sinensis (Chinese Wisteria)—30 ft. Zone V. Short, compact violet in May. Fragrant. Sun, drain. The entire new leaf-growth is pruned off in July. Then it blooms next year. 2-year
$1.25 \quad 9.50$
—alba (White Wisteria)—A good white form.
2-year $1.25 \quad 9.50$


## Plants to prevent erosion on steep Banks

Steep slopes can be put into grass and mowed. But it is never easy and maintenance is constant work and worry. The following plants do the job better from a point of view of roots holding earth in place. There are almost no maintenance-problems. However, all are vigorous and spreading, and four are inclined to get out of hand: Hedera, Lonicera, Rose and Vinca. They can be rigorously pruned back without the least harm, however.
Eventually one plant will cover a large area, but on banks it is important to get the soil held quickly. We suggest bad steeps be planted 18 inches apart each way-gentler slopes 2 feet, except as noted below.

CALLUNA vulgaris (Heather)
In sunny, windy, loose soils.

|  |  | $(25)$ | $(100)$ | (1000) |
| ---: | ---: | ---: | ---: | ---: |
| *21/4-in. pots | $\ldots . . .6 .00$ | 21.00 | 200.00 |  |
| 3-year | - | 22.50 | 80.00 | $\ldots . .$. |

CYTISUS scoparius (Broom)
Best for holding soil on steep banks, and in gullies. Yellow flowers in June. 12 to 18 in...........-. $5.00 \quad 15.00 \quad 135.00$

## HELIANTHEMUM (Sun-rose)

Is the best for dry, poor soils in sun. 2-year
$8.00 \quad 30.00 \quad 250.00$
HEDERA baltica (Hardy English Ivy) Use as vine or ground cover, in shade.
3 -inch pots
$11.00 \quad 40.00$
LONICERA japonica (Honeysuckle) 1 -year (light) … 12 to 18 in.--------- $4.50 \quad 15.00 \quad 110.00$
ROSE wichuriana (Memorial Ruse) Branches grow quickly, droop and root. Thick-set effect. Best in sun.
1-year
$9.00 \quad 60.00$
2-year
$\begin{array}{lll}10.00 & 35.00 & 300.00\end{array}$
[35]

PACHYSANDRA terminalis
Tolerant in poor soil and shade. Set 3 to each square foot.
$\begin{array}{lccc} & \text { (25) } & \text { (1nח) } & \text { (1nחก) } \\ \text { Rooted cuttings.... } & 2.50 & 7.50 & 75.00\end{array}$

WILDTHYME (Thermus Serpyllum) A mat in sun or light shade that entirely blankets the ground. Evergreen. Can be walked on. Hardy to Zone III. Set 1 foot apart.

| Strong clumps | 2.50 | 2.50 | 9.00 |
| :--- | ---: | ---: | ---: |

VINCA minor (Myrtle)
Evergreen, in sun or shade.
Strong champs .... $4.00 \quad 12.00 \quad 85.00$
Photo:-Hall's Japanese Honeysuckle used to hold and ornament a bad road embankment. This plant is extremely tolerant and will grow (though not so bushyl even in dense shade. The fragrance of a honeysuckle bank scents the air for hundreds of yards around:




Forsythia

THESE permanent garden citizens are the quickest and easiest to establish. At two or three years of age they begin bursting into vigorous bloom, in many cases. It is not therefore realized that their maturity is much nobler than their early flowering stages, and they are often crowded too closely together making a mass of starved greenery that is squeezed shapeless. On the other hand, to allow 6 feet circles for shrubs looks bare and awkward in the first half dozen years. Practical men plant approximately 3 feet apart and so plan the planting that after a number of years every second shrub can be removed, leaving the planting 6 feet each way. For dwarf shrubs these figures should be cut in half.


Mass Planting of French Named Lilacs in May

In the following pages we price two general sizes:-One marked $*$ which is small not well shaped (but will quickly grow so) and one not marked * which is fully shaped for a young plant. The larger size we sell one or more; the smaller cannot be sold in less quantity than catalogued-one must buy 5 (10 rate) or 50 (100 rate).

## Beauty all Year

## A TIME-TABLE OF SHRUBS



DWARF-(1 to 4 ft .)
Berberis thunbergii............................. $\times$
Cotoneaster adpressa
Daphne mezereum...
Deutzia grazilis
$\qquad$ $\times$.

Spiraea anthony waterer --.... .. $\times$ Cytissus..
Rhus canadensis.
Neviusa alabama


PLANTING SMALL SHRUBS
1 Loosen Soil
2 Dig Hole.
3 Tramp as you (4) Cut to Ground.


LARGER/SIZES


Neviusa alabamensis


Viburnum Burkwoodii

## PRUNING SHRUBS

Flowers come on old wood, so the rule is to prune when in bloom or just afterward. Thus no potential bloom is lost. Natural shrub shape is to have many main stems in a clump all ascending from the ground, so prune out old branches completely at the ground line thus encouraging plenty of new vigorous shoots. Branches in flower can be taken for house decoration at the time of pruning.

| March: | May: | June: |
| :--- | :--- | :---: |
| Cornus mas | Syringa (Lilac) | Philadelphus |
| Salix caprea | Cydonia | July-Sept.: |
| April: |  | Hydrangeas |

## DECIDUOUS SHRUBS (alphabetical)



Albizzia julibrissin rosea (Hardy Mi-mosa)- 12 ft . Zone VI. Very rare Interesting pink flower. An unshapely mound, but delicate Acacia leaves and "bottle-brush" blooms when blooms are scarce in July.
4 to 5 ft .
$3.50 \quad 30.00$
5 to 6 ft .
$4.50 \quad 40.00$

## AMELANCHIER

Amelanchier Canadensis-20 ft. Zone IV. Thin, bushy shrub or tree. Gay white show in early May

* 18 to 24 in . $\qquad$ $2.00 \quad 15.00$


## ARONIA

Aronia arbutifolia brilliantissima (Showy Red Chokeberry)-8 ft. Zone IV. White in May, brilliant red fruit. Moist.
3 to $4 \mathrm{ft} . \ldots \ldots \ldots \quad 1.15 \quad 9.00 \quad 75.00$

## AZALELS

Deciduous and Evergreen, pages 28-29

## BENZOIN

Benzoin aestivale (Spice Bush)-12 ft Zone V. Damp. A mist of pale yellow in April. Red berries.

* 18 to 24 in. $\qquad$ $1.15 \quad 9.00$
10.00

3 to $4 \mathrm{ft} . \ldots . . . . . . . . . . \quad 1.15 \quad 9.00 \quad 75.00$

## BERBERIS

Berberis Koreana (Korean Barberry)6 ft . Zone V. Showy yellow, May. Red berries hang late.

* 6 to 12 in $\qquad$ 75
10.00 15 to 18 in. $\qquad$ 756.50 50.00
-thunbergii (Japanese Barberry)-5 ft. Zone IV. Verv tolerant. Bushy and dense, red berry in autumn Fine hedge. The most valuable, useful shrub in cultivation.
* 6 to 9 in $\qquad$ 8.00
* 12 to 15 in . S $\qquad$ ------12.50 15 to 18 in. $\qquad$ $55 \quad 5.00$ 38.00 ——erecta (True Hedge Columnberry) -A good new form much more valuable for hedges. Erect. (Pat.) 15 to 18 in. $\qquad$ $6.00 \quad 45.00$ - -minor (Box Barb'y) -Dwarf form. 12 to 15 in............. $65 \quad 6.00 \quad 45.00$
- -atropurpurea - Red-purple form. Color not perfect, but fair.
* 3 to 6 in.
10.00

15 to 18 in.
$.65 \quad 6.00$
45.00

## BUDDLEIA

Buddleia davidii (Butterfly Bush) Zone VI.

- Charming - 8 ft. Bright, pink, June-August. Drain.
2-year $\qquad$ $\begin{array}{lll}.90 & 8.00 & 60.00\end{array}$
- Empire blue-Exquisite shade 2-year $\qquad$ $\begin{array}{lll}1.00 & 9.00 & 75.00\end{array}$ - White bouquet-Good white.

2-year ---.-.-.-......... $1.00 \quad 9.00 \quad 75.00$

- Royal red-Rich dazzling red

2-year .................... $1.00 \quad 9.00 \quad 75.00$

## CALLICARPA

Callicarpa purpurea (Chinese Beauty-berry)-5 ft. Zone V. Lilac-purple berries.

2 to $3 \mathrm{ft} . \ldots-\quad . \quad . . . . \quad 1.25 \quad 11.00$

## CLETHRA

Clethra alnifolia (Summer Sweet)$7 \mathrm{ft}$. Zone IV. White fragrant spikes very from July to August. Acid soil. * 12 to 24 in $\qquad$ 1.15

2 to 3 ft ...---...... $1.15 \quad 9.50 \quad 85.00$
10.00
--Rosea-rare, pink flowered form; otherwise the same as alnifolia. Very interesting and valuable variety.

Sold out.

## CORNUS

## Cornus Horida (See page 55)

-sanguinea (Bloodtwig Dogwood)10 ft Zone IV. Sun, damp. Flower and fruit poor. Deep red bark in winter.
3 to 4 ft $\qquad$ $1.15 \quad 10.00$
85.00
-siberica (alba) (Tatarian Dogwood) 8 ft . Zone I. Flower and berry slight in effect. Vivid red bark. Tolerant. 18 to 24 in.................. $4.50 \quad 35.00$ 3 to $4 \mathrm{ft} \ldots \ldots \ldots \mathrm{l}-1.15 \quad 10.00 \quad 60.00$
-stolonifera (Red Osier)-8 ft. Zone I. Sun, damp, spreading. Again, valued for bright red winter bark.
*18 to 24 in. $\qquad$

9.00

- -lutea (Goldtwig)-Smaller and a really bright yellow bark.
18 to 24 in.................. 5.00
35.00

3 to $4 \mathrm{ft} . . . . . . . . . . . ~ 1.25 \quad 11.00$
65.00


Amelanchier in May

## CHAENOMELES

Chaenomeles japonica (Japanese Quince)-4 ft. Zone V. Sun. Bushy dwarf. Scarlet flowers in April. A tolerant ornamental shrub. Slow growth. Can be kept pruned.
*12 to 18 in
10.00

3 to $4 \mathrm{ft} \ldots \quad 1 . \quad 1.25 \quad 11.00 \quad 90.00$

## -Hybrida

——White-Large; white.

- -Rosea grandiflora-Pink.
- Rubra grandiflora-Early. Large deep red blooms.
——Nivili-Large, pure white
- Columbia-Elongated rosy red.

Above five named varieties:
3 -year grafts .-.-..... $2.25 \quad 20.00$

## CYTISUS

Cytisus scoparius (Common Broom) 4 to 8 ft . Zone V. Bushy, upright stems. Yellow, May-June, Drain. Sun. Perhaps the best cover for dry banks. A sight in bloom.
*18 to 24 in $\qquad$ $1 . \quad 4.00$
20.00 4 -in. pots $1.10 \quad 9.00$
-praecox (Warminster Broom)-5 ft. Zone V. Amazing shower of pale yellow in May. Outstanding.
3 -in. pots ..-........... $1.50 \quad 12.50$
5-in. pots .............. $2.25 \quad 21.00$

## DAPHNE

-Daphne cneorum (See page 30)
-mezereum (February Daphne)-3 ft. Upright. Zone IV. In April has lilacred masses of bloom. Sun, lime. Foliage apt to suffer in hot summers, 18 to 24 in............. $2.25 \quad 17.50$ so give part shade south of Boston. -alba-Exactly like Mezereum but flowers white (much more showy) and fruit yellow. Rare.
18 to 24 in............. $4.00 \quad 37.50$


Albizzia julibrissin rosea


Deutzia gracilis

All shapely specimens except * $=$ young, unformed plants (See page 13).

llex verticillata


Hibiscus syriacus


Deutzia gracilis-3 ft. Zone V. Drain Danty mass of white, May
15 to 18 in.............- .958 .50
6500
—scabra-Pride of Rochester-Large pinkish white blooms. Vigorous. Zone V. 8 ft .

* 18 to 24 in...
12.00

3 to 4 ft .
1.15
10.00
60.00

## ELEAGNUS

Eleagnus angustifolia (Russian Olive) 20 ft . Zone IV. Drought-resisting Yellow berries in Sept.

* 12 to 18 in. $\qquad$

15.00
-multiflora (See page 64)


## ENKIANTHUS

Enkianthus campanulatus (Redvein Enkianthus)-12 ft. Leaves brilliant in fall. White bells in May. Acid, humus.
2 to 3 ft . B\&B.... $3.50 \quad 30.00 \quad 250.00$

## EUONYMUS

Euonymus alatus (Winged Euonymus) - 8 ft . Zone V. Pink-crimson autumn leaves. Interesting shrub.
3 to $4 \mathrm{ft} . . . . . . . . . . . . .-2.25 \quad 18.00 \quad 125.00$

- compacta-Dense dwarf form.
* 6 to 8 in.

3 ...... $4.00 \quad 35.00$ 3 to $4 \mathrm{ft} .-\ldots-\ldots-\ldots . .$.
-bungeana (Winterberry) - 18 ft . Zone iv. Many pinkish fruits, Oct. 3 to 4 ft ............. $1.25 \quad 11.00$ 90.00

Euonymus europeus (Spindle-tree) -
20 ft . Zone III. Showy red and orange fruit, Sept.
3 to 4 ft , $-\ldots . \quad 1 . \quad 1.15 \quad 10.00 \quad 85.00$

- -yedoensis (Yahoo)-12 ft. Zone V. Pink fruit in Sept. Handsome leaf.
2 to 3 ft .
$.95 \quad 7.50$
60.00


## EXOCHORDA

Exochorda grandiflora (Pearl Bush)12 ft . Zone V. Show of pearl white in May. Drain. Avoid lime.
3 to 4 ft ............. $1.25 \quad 10.00$
85.00

## FOTHERGILLA

Fothergilla monticola-6 ft. Zone V. Odd, white spikes of white, early May. Showy. Orange fall leaves. Humus, drain. 3 to 4 ft .
5.50

## FORSYTHIA

Forsythia intermedia (Golden Bell)9 ft . Zone V. Familiar yellow blooms in April. Almost fool-proof.
*18 to 24 in.
10.00

3 to $4 \mathrm{ft} . . . . . . .-.--\quad . \quad .95 \quad 9.00 \quad 55.00$

- Form Form of above with pale, creamy flowers. Unique, showy.
*18 to 24 in.. $\qquad$

15.00

3 to $4 \mathrm{ft}$. .
45.00

- -spectabilis_More, larger, yellower flowers. Zone V. 8 ft .
* 12 to 18 in
10.00 3 to $4 \mathrm{ft} . \ldots-\cdots-\cdots \quad 1.15 \quad 9.00 \quad 65.00$
—ovata (Korean Forsythia) - 6 ft . Zone IV. Less showy, but decidedly hardier and a week earlier.
3 to $4 \mathrm{ft} . \ldots \ldots . . .-. . . \quad 1.35 \quad 12.50 \quad 110.00$
-suspensa (Weeping Golden Bell)6 ft . Zone V. Good May show. Drooping branches root and hold banks.
* 12 to 18 in .
15.00

3 to 4 ft ....
$1.25 \quad 11.00$
85.00

## HAMAMELIS

Hamamelis vernalis (Spring Witch-hazel)-6 ft. Zone V. Pure yellow in early March. More fragrant. Bushy, suckering clumps. Prefers damp soil.

-Virginiana-20 ft. Zone III. Small fragrant yellow, October. Shade.
*18 to 24 in...--.....-. .-...- $2.00 \quad 10.00$ 3 to $4 \mathrm{ft} . . . . . . . . . . . . \quad 1.25 \quad 7.50 \quad 45.00$

## HIBISCUS

Hibiscus (Althea) - 12 ft Tree-like. Zone V. Heavy soil. Various colors in July and August. Double pinks and whites are very good. Avoid purples and reds, except singles.

* 12 to 18 in . S .
6.00
——Anemonaeflorus _ Semi-double pink. Six weeks in bloom.
- Coelestis-Large single blue.
- Totus albus-Large single white.

Prices in above 3 kinds:-

$$
\begin{aligned}
& 3 \text { to } 4 \mathrm{ft} . \ldots \ldots-\cdots \quad 1.15 \quad 10.00 \\
& 5 \text { to } 6 \mathrm{ft} . \ldots . \ldots \ldots \ldots . . . .
\end{aligned}
$$

## ILEX

Ilex opaca (See page 31)
Ilex serrata - 15 ft . Zone V. More graceful; more, smaller and shinier berries than Ilex verticillata.

## 3 to 4 ft . B\&B.... 2.7523 .00

-verticillata (Winterberrv) - 15 ft.
Zone V. Dampness preferred. Many red berries all winter. A show.

* 18 to 24 in....
12.00

3 to $4 \mathrm{ft} . \ldots \ldots . . . . . . \quad 1.25 \quad 10.00 \quad 70.00$

## HYDRANGEA

Hydrangea arborescens grandiflora (Snow Hill)-4 ft. Zone V. Straggling unless cut to ground. Huge white blooms, July-August. Manure.
18 to 24 in...........-. $.95 \quad 8.50 \quad 65.00$
-paniculata grandiflora (Peegee)10 ft . Zone IV. Similar to above, a month later, and blooms turn pink. 12 to 18 in................. $\quad 6.00 \quad 35.00$ 2 to $3 \mathrm{ft} .---\cdots \quad 1 .-\cdots \quad 10.00 \quad 85.00$
-Hardy Blue-Attractive. Zone VI.
12 to 15 in. B\&B... $2.25 \quad 20.00$

## KOLKWITZIA

Kolkwitzia amabilis (Beauty Bush)8 ft . Zone V. Sun, loose. A light green fountain flushed with a cascade of pink in June.
18 to 24 in ..
3 to 4 ft.
$7.50 \quad 65.00$
3 to $4 \mathrm{ft} .------\cdots \quad 1.5012 .50 \quad 100.00$

## LIGUSTRUM

Ligustrum amurense (Åmur Privet"North") - 12 ft. Zone V. Almost fool-proof.

* 12 to 18 in.
12.00

18 to 24 in .
17.50
-ibolium (Hybrid Privet)— 10 ft . Zone IV. Hardy and compact. The best privet hedge for the north.

* 12 to 18 in...
9.50

2 to $3 \mathrm{ft} . .--\cdots-\cdots \quad 3 .-\cdots$
-ovalifolium (California Privet) - 15
ft . Zone VI. Kills back in severe winters. Also fool-proof to grow.

* 12 to 18 in.
$\begin{array}{lr}9.50 \\ 3.00 & 15.00\end{array}$
Photo: Spiraea Van Houttei



## LONICERA

Thrive in any garden soil. Tolerant. See also page 34 for vine forms.

Lonicera fragrantissima (Winter Hon-eysuckle)-6 ft. Zone V. Yellow, fragrant, April; red berries, July. Semi-evergreen.

* 12 to 18 in. $\qquad$
$\qquad$
3 to 4 ft .
. 1.15
65.00
-korolkowi floribunda (Broad Blue-leaf)-9 ft . Zone V. Intricate gray shrub. Pink in June, scarlet fruit in July.
*18 to 24 in...-.............. ........ 12.00 2 to $3 \mathrm{ft} . \ldots-\quad 1 . \quad 1.15 \quad 10.00 \quad 85.00$
-morrowi (Morrow Bush Honey-suckle)-7 ft. Zone IV. Spreading, bushy. Cream in July, scarlet fruit in July.
*12 to 18 in.................. ........ 10.00 3 to 4 ft ............ $1.15 \quad 10.00 \quad 65.00$
-tatarica (Tatarian Honeysuckle)-8 ft . Zone IV. Bushy. Flower, June; red berry, July. Order: Red, White, or Pink.
*12 to 18 in............. ...... ........ 10.00 3 to $4 \mathrm{ft} \ldots \ldots \ldots . \quad 1.15 \quad 10.00 \quad 75.00$


## MYRICA

Myrica carolinensis (Bayberry)-6 ft. Zone IV. A shapely rounded bush. Good foliage. Barren, sandy soils15 to 18 in. $\qquad$

## NEVIUSA

Neviusa alabamensis (Snow Wreath) -5 ft . Zone V. Showy white, odd blooms in masses, June. Drain.
Sold out.

## PHILADELPHUS

Philadelphus coronarius (Sweet Sy-ringa)- 9 ft . Zone IV. White in June. Very fragrant. Needs lime.

-grandiflorus (Scentless Mock Or-ange)-9 ft. Zone V. Large white blooms. June.
3 to $4 \mathrm{ft} . \ldots \ldots \ldots \ldots$
85.00
-Mt. Blanc-4 ft. dwarf, upright and compact, with many single white blooms. Useful, showy, fragrant.
3 to $4 \mathrm{ft} . . . . . . . . . . . . . \quad 1.15 \quad 9.50 \quad 75.00$
—virginal-8 ft . Zone V. Double, fragrant, translucent white blooms load the bush in June. Then a fair show through summer, particularly if pruned.
18 to 24 in.-.---------.-.-.- $7.50 \quad 65.00$
3 to $4 \mathrm{ft} . .--.-\frac{-\quad-\quad-\quad 1.50 \quad 12.50 \quad 95.00}{}$

## PHOTINIA

Photinia villosa (Christmas Berry) 20 ft . Zone V. Drain, sun. White in May. Showy red fruit. Birds love it. *12 to 18 in.............. ...... ......... 17.50 3 to 4 ft.............. $1.15 \quad 9.00 \quad 75.00$

## POTENTILLA

Potentilla fruiticosa-5 ft. Zone II. Large bright yellow bloom from May to August. Sun, drain, moist. Useful.
15 to 18 in .
$.90 \quad 6.50$
-Veitchii-Form with pale yellow, large showy flowers. Very handsome.
15 to 18 in..........-.-. . 906.50

## PRINSEPIA

Two exceedingly rare, interesting species, spiny and slender. Sun, drain.
-Prinsepia sinensis-7 ft. Zone IV. Bright green leaves long before other shrubs start. Bright yellow, small, March. Tasty, cherry-like fruit. August. Unusual, rare.
18 to 24 in.--------...-- 1.9517 .50
-uniflora-Slender, to 5 ft . Zone V. White, April. Also edible fruit. Smaller in all parts than above. 18 to 24 in... $1.95 \quad 17.50$

## PRUNUS

Prunus maritima (Beach Plum)-6 ft. Zone IV. Straagling, white flowers, edible fruit. Grows in salt spray on seashore.
*18 to 24 in..........--- ..---- -...---- 60.00

4 to $5 \mathrm{ft} . . .-\ldots . . .$.

## RHAMNUS

Rhamnus cathartica (Buckthorn)-15 ft . Zone I. Fine, bushy, dense, thorny hedge. Very hardy.

-frangula-15 ft. Zone I. Like above, but shiny leaves. August a load of red-purple fruit.


## RHODOTYPOS

Rhodotypos kerroides (White Kerria) 6 ft . Zone IV. Very tolerant. White in May, black shiny fruit all summer.

$$
\begin{array}{rrrr}
18 \text { to } 24 \text { in.........-.-. } & 7.00 & 50.00 \\
3 \text { to } 4 \text { ft............ } & 1.25 & 11.00 & 95.00
\end{array}
$$

## SYRINGA (The Lilacs)

All lilacs are tolerant, dislike acid soil, free to bloom. Probably the easiest and most useful of all shrubs.

## Photo: Planting of Hybrid Lilac.



## SPECIES

Syringa chinensis ("Rothomagensis") 12 ft . Zone V. Graceful; Lilac, May. Very faithful bloomer. Lime. Sun.

|  |  | (Each) | $(10)$ |
| :--- | :--- | :--- | :--- |
| 18 to 24 in................ | 6.00 | 50.00 |  |
| 5 |  |  |  | 3 to 4 ft $125-900-8000$ -japonica (Tree Lilac) - 30 ft . Zone V. Blue-gray clusters in June and July. Different. Tolerant.

18 to 24 in................... $7.00 \quad 65.00$ 4 to $5 \mathrm{ft} . \ldots \ldots$........ $1.75 \quad 15.00 \quad 120.00$
-persica (Persian Lilac)--6 ft. Zone
V. Fragrant lilac, May.

3 to $4 \mathrm{ft} . . . . . . . . . . . .1 .5012 .50$
-alba-A white form.
3 to 4 ft ............ $1.50 \quad 12.50$
-villosa (Late Lilac)-9 ft. Dense. Zone V. Violet, late May.
12 to 18 in............... $\quad 4.50 \quad 35.00$
3 to $4 \mathrm{ft} \ldots \quad 1.15 \quad 9.00 \quad 65.00$
--Lutece (Henryi)-Larger flowers. 3 to 4 ft ............ $1.50 \quad 12.50$
-Vulgaris (Old-fashioned Lilac)-15 ft . Zone IV. Spreads by suckers to huge clumps. Purple, May. Fragrant.

* 18 to 24 in
12.00
$\begin{array}{llllll}3 & \text { to } 4 \mathrm{ft} . \ldots & -\quad . \quad & 1.25 & 10.00 & 85.00\end{array}$
- -alba-White form of above.
* 18 to 24 in. $\quad 12.00$



## NAMED HYBRID LILACS

Derived from S. vulgaris, which they resemble in general character. Each kind below separately priced at:

A-1 yr., 6 to 15 in.......... $\$ .90 \$ 7.50$
B-18 to 24 in...-.................. $1.25 \quad 10.00$
C-2 to 3 ft ......................... $1.50 \quad 12.50$
$\mathrm{D}-3$ to $4 \mathrm{ft} . \ldots-\quad 2.00 \quad 16.00$
BCD - Bleuatre-S. pure blue (6.4)
BCD - Chas. Joly-D. red-purple (6.8)
BCD - Ellen Wilmot-D. white (8.0)
BCD - Emil Gentil-D. pure blue (7.6) ABCD-J van Tol-S. white (7.5)
CD - J. Calot-S. lilac (7.3)
BCD - K. Havemeyer-D. pinkish (7.3)
A -Lamartine-S. early pink (6.9)
BCD -Leon Gambetta-D. lilac (7.3)
BCD -Lucie Baltet-S. pure pink, dwarf (8.0)
ACD -Ludwig Spaeth—S. purple (7.8)
BCD -Mme. C. Perrier-D. white (6.3)
BCD - Mme. Felix-S. white, dwarf (7.2)

BCD - Mme. F. Morel-S. purple (8.2)
BCD - Monge-S. dark purpre (8.3)
BCD - Paul Thision-D. red-purple (8.0)

BCD -Pres. Falieres-D. lilac (7.7) BCD - Pres. Grevy-D. bluish (6.9) A -R.v. Horstenstein-S. red (7.4) (Letters indicate sizes available. Colors are indicative-no lilac color can be accurately described. Ratings are relative, 10.0 would be perfect.)

## RHUS

Rhus canadensis (Fragrant Sumach) -3 ft . Trailing. Zone IV. Yellow, April. Grows in poor soil.
*12 to 18 in.. $\qquad$ $1.15 \quad 8.00$ 9.00 2 to 3 ft . 40.00

## ROBINIA

Robinia hispida (Moss Locust)-9 ft. Zone III. Very tolerant, needs pruning, but fine peaflowers, May. 2 to 3 ft .......... $1.15{ }^{8.00} 75.00$

## ROSA

All Roses are on pages 67-68

## SPIRAEA

Spircaea Anthony Waterer-3 ft. Zone V. Rose blooms, June to August. Best dwarf.
15 to 18 in. $\qquad$ $\begin{array}{lll}.90 & 7.00 & 55.00\end{array}$
-trichocarpa (Korean Spiraea)-6 ft. Zone V. Neat, spreading bush. Garlands of white, June. 3 to $4 \mathrm{ft} . . . . .-\quad . \quad 1.15 \quad 9.00 \quad 75.00$ -Van Houttei (Modern "Bridal-wreath")-6 ft. Zone IV. Familiar everywhere for the white May garlands.

* 12 to 18 in................... ....... 9.00 3 to $4 \mathrm{ft} . \ldots-\quad-\quad 1.00818 .00$


Syringa hybrid, Double.

## SYMPHORICARPOS

Symphoricarpos racemosus (Snowberry) - 5 ft . Zone IV. Clay, lime. Useful for showy white berries in August. Good dwart shrub.
18 to 24 in. $\qquad$ $\mathbf{1} .15 \quad 4 n$
7.50
30.00 3 to $4 \mathrm{ft} . \ldots-\quad-\quad . \quad-\quad 1.15 \quad 7.50 \quad 45.00$
-vulgaris (Coralberry)-5 ft. Zone IV. Thin growth. Berries small, but red and hang late.

* 12 to 18 in. $\qquad$ | . | - | 7.00 |
| ---: | ---: | ---: |
|  | 6.50 | 40.00 |


## TAMARIX

Tamarix africana - 15 ft . Zone V. Fink in April.
2 to $3 \mathrm{ft} . . . . \quad . \quad . \quad . \quad . \quad 65 \quad 650$
-pentandra-15 ft. Zone V. Pink racemes. July-August.
2 to $3 \mathrm{ft} . . . . . . . . . . . . . . . . . .$.
$6.50 \quad 55.00$


Viburnum Carlesii in May.

## (Each) <br> VIBURNUM

Viburnum acerifolium (Maple-leaf Vi-burnum)-6 ft. Zone III. Shade. Dry. Handsome leaf.

* 12 to 18 in . $\qquad$ 10.00 3 to 4 ft ............. $1.50 \quad 12.50 \quad 95.00$
-americanum (See trilobum)
-burkwoodi-5 ft Zone V. New hybrid, with fragrant pink blooms in May, borne young. Superior to Carlesii though similar.
*12 to 18 in. XX $\begin{array}{lllll}15 \text { to } \text { to } & 18 & \mathrm{in} \text {. } \mathrm{B} \& B & 3.75 & 30.00 \\ 275.00\end{array}$ 2 to 3 ft . B\&B.: 6.5055 .00
-carlesi (Fragrant ${ }^{\text {V }}$ Viburnum) - 5 ft . Zone V. Delicious pink clusters in May. Drain; keep moist in summer. Sun, shelter. Fragrant, beautiful.
$\begin{array}{llll}* \\ 6 & \text { to } 8 & 8 \text { in. (pot) } & 12.50 \quad 100.00\end{array}$ 15 to 18 in. B\&B.. $3.50 \quad 30.00 \quad 250.00$ $21 / 2$ to 3 ft . B\&B... $6.00 \quad 50.00 \quad 400.00$
-dentalum (Arrow Wood)—12 ft| Zone IV. Damp, shade. Cream, May. 18 to 24 in... $\quad . \quad . \quad . \quad . \quad . \quad .00 \quad 35.00$ 3 to 4 ft t.............. $1.15 \quad 8.00 \quad 55.00$
-dilitatum (Linden Viburnum) - 10 ft . Zone V. Full of character. Cream in June; scarlet fruit all winter. 3 to 4 ft . $\qquad$ $1.25 \quad 11.00$
-lantana (Wayfaring Tree) - 15 ft . Zone IV. Bold, striking, fall color. Fruits red, then black. Lime.
18 to 24 in...-............. $5.00 \quad 35.00$ $\begin{array}{lllllll}3 & \text { to } & 4 \mathrm{ft} . \ldots & & 1.15 & 8.00 & 55.00\end{array}$
-Ientago (Nannyberry)-25 ft. Zone I. Damp, shade. Black berry. Crimson fall leaf.
18 to 24 in....-............... $5.00 \quad 35.00$

-opulus (European Cranberry) - 12 ft. Zone III. White, May. Fruit and leaf red in autumn. Strong, bold effect. Verv handsome. (Americanum is even better.)

$$
\begin{aligned}
& 18 \text { to } 24 \text { in } \\
& \begin{array}{l} 
\\
\hline
\end{array} \begin{array}{l}
5.00 \\
8.25
\end{array} \\
& 40.00 \\
& 60.00
\end{aligned}
$$

Viburnum opulus nanum -2 -foot Dwarf replica of opulus.
12 to 15 in .............. $1.60 \quad 12.50$
——sterile (Snowball) - Bush like Opulus, but flowers much showier and no berries at all.
12 to 18 in..................- $5.00 \quad 40.00$
3 to 4 ft . $\qquad$ 1.25
$8.00 \quad 75.00$
-prunifolium (Black Haw) - 15 ft . Zone V. Like a Hawthorn, May, white. Black fruit hangs late.
18 to 24 in................... $9.50 \quad 85.00$ 3 to 4 ft ............... $2.00 \quad 17.50 \quad 140.00$
-tomentosum (Doublefile Viburnum) 10 ft . Zone V. Horizontal strings of snowy blooms in June. Neat
3 to $4 \mathrm{ft} . \ldots-\quad$......... $1.25 \quad 11.00 \quad 95.00$
——plicatum (Japan Snowball)—Form without fruit, but showier bloom.

-trilobum (Cranberry Bush) - 12 ft . Zone I. Bright berries all winter. Fall color. Also page 64


## VITEX

Vitex agnus-castus (Lilac Chaste Tree) 8 ft . Zone VI. But a hardy perennial further north. Showy lavenderblue flowers July to frost. Sun, acid. 3 to $4 \mathrm{ft} . . . . . . . . . . . . .1 .50 \quad 12.50$

## WEIGELA

Weigela amabilis (Rosea)-9 ft. Zone Zone V. May. Pink. Drainage. 3 to 4 ft .............. $1.50 \quad 9.50 \quad 75.00$
-Candida-June. Profuse, creamy. 3 to 4 ft ,............ $1.50 \quad 9.50 \quad 75.00$
-Eva Rathke-Dark red blooms in June, then sparsely to August. 3 to 4 ft ....-.-.-. 1.25 lu.vu 85.0

## PART




## EVERGREENS

BEGINNING on page 44 with ABIES and continuing alphabetically through to TSUGA on page 51 are presented a large range of sizes, shapes, colors of evergreens. Below is a photograph showing the eight commonest types of leaf. Many of the evergreens make large, noble trees-utterly unsuited to small intimate gardens or the foundation planting of homes. For this reason a list of true dwarf forms appear on the next page.
No soil or exposure but has some coniferous evergreen suited to it. Dense shade and dampness will grow Hemlock (TSUGA) and strong, baking sun or light, dry soil will grow JUNIPERS.


NOTE: Water is needed more by evergreens than by other plants. Keep moist before and after planting.



Babyhood, 1st to 4th year

9 year XXX (18 to 24 in.)
the life of an everGREEN TOLD IN PHOTOGRAPHS.
The species used for these pictures is TAXUS capitata - The Upright or "Tree-form" Yew. This is described and priced on page 48. Other kinds of evergreens go through the same stages except cuttings and grafts.

## Pruning Evergreens

Pruning and trimming evergreens is different from other plants. Kinds that make long leaders (Pines, Spruce, Firs) should be pruned in June just before the leader has hardened, by cutting half the new growth away. Hemlock and Yew are treated the same way, but these two grow all summer, therefore pruning is done twice-June and August. Juniper, Chamaecyparis and Arborvitae can be trimmed with shears, but it is better to cut inside the surface, removing
 little fronds with stem, in May.

## Delivery Costs

Prices include packing only on small, bare-root sizes-NOT on sizes marked "B\&B" Boxing of these varies in cost-usually about $10 \%$ of the price additional. Cost of express on small sizes is low-another $10 \%$-but on plants with a ball ( $B \& B$ ) and over 2 feet, it is a heavy expense. Allow about $40 \%$ for packing and transporting these larger plants. We will estimate cost in advance if you wish.

## Spacing Evergreens

How far apart evergreens should be planted is not easy to say-even for one kind at a time. Evergreens are so very long-lived that what is correct in youth is crowded after 25 or 50 years. Generally speaking, lining-out sizes under 12 inches should be put in beds until older; shaped plants from 12 to 36 inches should be spaced two to three feet apart and removed at the end of 5 to 10 years by rearranging the entire planting. Trying to leave enough space for more than 10 years' growth means spending the first five of those years looking at empty space. Slow-growing dwarf varieties are, of course, most easily planned for.



Taxus capitata ( 12 year $B$ \& $B 4 f t$ )

## DWARF EVERGREENS

## Low, Spreading Dwarfs

Juniperus horizontalis Juniperus chinensis Sargenti Juniperus communis depressa Taxus baccata repandens Taxus cuspidata nana Tsuga canadensis Sargenti
Narrow, Upright Dwarfs
Juniperus excelsa stricta Juniperus communis hibernica Picea canadensis conica Taxus baccata fastigiata Taxus Hunnewelliana Taxus cuspidata columnaris Taxus media Hicksi Tsuga canadensis fremdi

## Bushy Dwarfs

Chamaecyparis obtusa nana Chamaecyparis filifera aurea Juniperus chinensis Pfitzeri Juniperus Sabina
Juniperus squamata Meyeri Picea excelsa Gregoriana Picea excelsa Maxwelli Picea excelsa nidiformis Pıcea excelsa pymaea Pinus montana Mughus Thuja occidentalis globosa Thuja occidentalis Ellwangeriana Thuja occidentalis, Little Gem Taxus cuspidata Vermeulen Taxus canadensis stricta Taxus media Kelseyi


Tsuga canadensis (Hemlock)


Mugho Pine

## EVERGREENS (Alphabetical List)

## ABIES

Stately, "spruce"-like trees, hold ing their lower branches into a riper old age than any spruce. Good soil, drainage; sun
 Zone II. Dark, shapely pyramid Needs cool moist soil. Best in North.

* 6 to 8 in . S .
12.00
* 9 to 12 in. X.
35.00
-concolor (White Fir)—50 ft. Zone IV. Dense pyramid silver green. Drainage. Tolerant in cities. Softest of dull silver-almost white.
6 to 8 in. S 2 to 3 ft . B\&B.... $6.00 \quad 55.00$
-"douglasi" (Pseudotsuga taxifolia) (Douglas Fir)-70 ft. Zone IV. Evergreen tree. Shapely, handsome pyramid. Prefers rich soil, but tolerant. Good in garden or forest. This handsome "spruce"-shaped evergreen is in every way better than ordinary spruces.
* 6 to 8 in. S
12.00
* 9 to 12 in. X
30.00
55.00
* 10 to 12 in. XX

$$
2 \text { to } 3 \mathrm{ft} . \mathrm{B} \& B \ldots 6.00 \quad 50.00
$$

-homolepis (Nikko Fir)-60 ft. Zone IV. Stately and classic. Leaves dark above, white beneath. Moist rich loam.
3 to 4 ft . $\mathrm{B} \& \mathrm{~B} \ldots 6.50 \quad 55.00$
-veitchii (Veitch Fir)—50 ft. Zone III. Narrow pyramid, with soft effect, though needles are long and dark green. Damp loam. Somewhat slow in growth. Hence useful as a specimen on small lawns. Retains low branches in old age.
3 to 4 ft . B\&B........ $6.50 \quad 55.00$

## CEDRUS

Cedrus atlantica fastigiata (Sentinel Cedar)-Thin column green.
15 to 18 in. B\&B.... $3.50 \quad 30.00$
4 ft . B \& .
10.00
-libani (Cedar of Lebanon)-Majestic to' 90 ft . Zone VI. Rich, drained soil. Prices on request.

## CEPHALOTAXUS

Cephalotaxus drupacae (Japanese Plum-yew)-Slow, spreading tree to 25 ft . Zone V. Evergreen. Drain, part shade

* 8 to 10 in....
5.00
45.00
--fastigiata-Rugged green column, like Irish Yew. Zone VI.
12 to 15 in. B\&B.... $3.00 \quad 25.00$
24 to $30 \mathrm{in} . \mathrm{B} \& \mathrm{~B} \quad . \quad 6.00 \quad 57.50$


## CRYPTOMERIA

Cryptomeria Japonica Lobbi-A different evergreen-plumey tiny foliage Tolerant. A daark column. Zone V 20 ft .
5 to $6 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \ldots 12.00 \quad 110.00$

## CHAMAECYPARIS

"Retinospora" (Jdpan Cypress) Evergreen trees of easy culture. Most are at best semi-dwarf, not truly dwarf.

Chamaecyparis lawsoniana (Lawson's Cypress)- 120 ft . Zone V. Huge, tall tapered column of green. Moist climate.

## (Prices on request

—obtusa (Hinoki Cypress-35 ft. Zone III. Acid, humus, moist. Ornamental, slow. Dark green column.
15 to 18 in. $B \& B \quad 3.50 \quad 30.00 \quad 25003$

- -nana (Dwarf Hinoki) - A small dwarf that looks ancient when it is born. Dwarfest of all cypress. Dark green. Excellent in rock gardens. 5 ft .
 $\begin{array}{lllll}15 & \text { to } 18 & 18 & \text { in. } \mathrm{B} \& \mathrm{~B} & 3.50 \\ 30.00 & 280.00\end{array}$ 24 to 30 in. $B \& B$.... $5.50 \quad 50.00 \quad 450.00$
—pisifera (Sawara Cypress)—35 ft. Any good soil. Loose growth. Makes a quick pyramidal tree and stands harsh exposures.
*12 to 15 in. X. 18 to 24 in. B\&B.... $3.50 \quad 27.00 \quad 250.00$
- -aurea (Golden Sawara)—Shining yellow. 35 ft .
* 6 to 8 in. X. $\quad 4.00 \quad 35.00$ $\begin{array}{llll}18 & \text { to } 24 \text { in. B\&B... } 3.50 \quad 27.00 \quad 250.00\end{array}$

Chamaecyparis filifera (Thread Cy-press)-20 ft. Stringy leaves. Compact broad pyramid. Semi-dwarf and useful almost anywhere. Unusual appearance and character.
*12 to 15 in. X. $\quad$......... $6.00 \quad 55.00$ 15 to 18 in. B\&B.... $3.50 \quad 27.00 \quad 250.00$

- -aurea (Gold-Thread)—Only 12 ft Yellow. A good dwart.
*12 to 15 in. X $\quad 6.50 \quad 60.00$ 18 to 24 in . B\&B.... $3.00 \quad 27.00 \quad 225.00$
-plumosa (Plumed Cypress)—35 ft. Feathery pyramid. Good hedge plant. A good accent tree. Often used in foundation plantings, but not suitable really.
$\begin{array}{lrrr}\text { * } 8 \text { to } 10 \mathrm{in} . \mathrm{X} & & & 30.00 \\ \text { *12 to } 15 \mathrm{in} . \mathrm{X} & & 6.00 & 55.00 \\ 18 \text { to } 24 \mathrm{in.} \text { B\&B } & 3.00 & 27.00 & 250.00\end{array}$
- -aurea (Gold-Plume)—25 ft. Good yellow color at tips. An interesting small tree. The color is balanced by green. A striking hedge. A good specimen.
* 8 to 10 in . X .-...... -....... 30.00
${ }^{*} 10$ to 12 in . X.-....... $\quad 7.50 \quad 45.00$
18 to 24 in. B\&B.... $3.00 \quad 25.00 \quad 200.00$
-squarrosa Veitchii (Veitch Moss)Unusual. 20 ft . Dense, woolly silver foliage unlike any other evergreen. Apt to winter damage beyond Zone VI.
6 to 8 in. X............. $4.00 \quad 25.00$
18 to 24 in. B\&B.... $3.50 \quad 27.00 \quad 250.00$

Photo: Chamaecyparis varieties. 1. obtusa. 2. pisifera. 3. Plumosa. 4. Squarrosa veitchii. 8. Plumosa thedgel. 12. obtusa nana.


[^4]

Photo: Junipers-1. Virginiana Keteeleri. 2. squamata Meyeri. 3. sabina. 4. communis depressa plumosa. 5. chinensis Sargenti. 6. sabina tamariscifolia. 7. excelsa stricta. 8. chinensis hibernica. 9. procumbens. 10. communis depresa. 11. virginiana Kosteri. 12. virginiana. 13. chinensis Pfitzeriana.

## JUNIPERUS

The Junipers are a race of evergreens that succeeds even in well-drained soil in full, baking sun. Dwarf or semi-dwarf.


Juniperus chinensis pfitzeriana (Pfitzer Juniper)- 6 ft . Zone IV. Gorgeous bush, a cloud of silver in spring, then bright green. Spreads picturesquely. Stands soot, smoke, and drought in city plantings. Easily grown.

* 6 to 8 in. X......... ....... ......... 31.00
*12 to 15 in. X 18 to 24 in. B\&B_-.. $4.00 \quad 35.00 \quad 300.00$ - Pfitzeriana compacta - Neater and smaller, to 4 feet. Otherwise the same.
* 4 to 6 in. X.-...... ....... $4.50 \quad 35.00$ 18 to 24 in. B\&B_-.. $4.00 \quad 35.00 \quad 300.00$ ——sargenti (Sargent)—3 ft. Zone IV. Flat, spreading. Color grass green; a neat plant. This is good for low mass effects. Also single specimens.
6 to 8 in . X
30.00

15 to 18 in. B\&B.... $5.50 \quad 40.00$

[^5]- -depressa aurea (Golden Bush-Juniper)-3 ft . A lower, neater form with yellow foliage.
* 12 to 15 in. X 12 to 15 in. B\&B-.- 3.5027 .00

Juniperus communis hibernica (Irish Juniper-15 ft. Zone IV. Green column. Popular. This makes a fair substitute for the thin spires of true Cypress-which are not hardy

* 8 to 10 in . X
* 10 to 12 in . X
30.00
* 10 to 12 in. X ---.... .-.-.- $6.50 \quad 35.00$ * 12 to 15 in. X $\quad$......... $7.50 \quad 55.00$ 18 to 24 in. B\&B $-\cdots 3.00 \quad 23.00 \quad 200.00$
-excelsa stricta (Greek Juniper)-6 ft . Zone V. Blue, stiff, fat pyramids. A fine dwarf, very neat, but rather formal. Does well in rich, loose soil.
* 6 to 8 in . $X$
20.00
* 10 to 12 in. X
30.00 18 to 24 in. B\&B_-. $4.00 \quad 35.00 \quad 300.00$
-horizontalis (Creeping Savin)-2 ft. Zone I. Flat spreading covers large areas. Green.
* 8 to 10 in. X
30.00
* 12 to 15 in . X
38.00
$\begin{array}{lllll}18 & \text { to } 24 \text { in. } \mathrm{B} \& \mathrm{~B} & 3.50 & 30.00 & 250.00\end{array}$
——douglasi (Waukegan) - Variety with blue foliage. Purple in winter * 8 to 10 in . X
25.00
——plumosa (Andorra Juniper) - A dense, low mat, with soft crested plumes rising. These turn purple in winter. A fine ground-cover. 12 to 15 in. X
50.00
$\begin{array}{lllll}15 & \text { to } 18 \text { in. B\&B } & 2.50 & 20.00 & 175.00\end{array}$
-Pfitzer's (See J. Chin. Pfitzer)
Juniperus sabina (Savin Juniper) -
5 ft . Zone IV. Irregular vase-like bush. Good dwarf for foundations Dark green color. Always graceful A fine native.
6 to 8 in. X
15 to 18 in. B\&B.... $3.00 \quad 27.00 \quad 250.00$
-squamata Meyeri (Meyer Juniper)5 ft . Zone V. Compact, interesting. Upright in a natural way, not stiff. The new growth is purple, old growth green. Easily grown.
* 6 to 8 in. X.-...... .....- ........- 25.00

15 to 18 in. B\&B $\ldots 3.50 \quad 27.00 \quad 250.00$
-virginiana (Native Red Cedar)-30 ft. Zone II. Prefers a loose soil. Usually a dark green pyramid. This is best used in masses. Easily grown. Should be sheared.

* 12 to 15 in. S.---
15.00

2 to $3 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} . .-5.50 \quad 45.00 \quad 400.00$

- -glauca (Silver Cedar) - 20 ft . Smaller edition of above with silver leaves.
2 to $3 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} . \ldots .6 .50 \quad 55.00$
- -keteleeri (Keteleer Cedar)-18 ft. A thick column, compact to base. Dark. Almost architectural in effect. Surpassingly rich and luxuriant. Very dense.
2 to $3 \mathrm{ft} . \mathrm{B} \&$ B.. $6.50 \quad 55.00$

[^6]
## PICEA (the Spruce)

Generally these evergreens are easily grown in normal garden soil. A few fine dwarfs-the rest forest giants.
-(Each) (10) (100)
Picea abies - "excelsa" - (Norway Spruce-80 ft. Zone II. A dark green, drooping pyramid. Shallow roots enable planting on thin soils. Enormously popular for quick growth. Used in forests, landscapes and for Christmas trees.
9 to 12 in . X
30.00

12 to 15 in. XX ........... 60.00
18 to $24 \mathrm{in} . \mathrm{B} \& \mathrm{~B}$.... $3.50 \quad 25.00 \quad 175.00$

- -aurea (Golden)-Large tree with showy colored leaves
5 to $6 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} . . .12 .50$
- -clanbrasiliana (Barry) - Nice
dwarf of good habits.
15 to 18 in. B\&B.... $6.50 \quad 60.00$
- -maxwelli (Maxwell)-2 ft. Greener, and more spreading.
8 to 10 in . B\&B.... $2.50 \quad 20.00$
15 to 18 in. B\&B_--. $4.50 \quad 35.00$
- -nidiformis (Bird Nest)-3 ft. Grotestque rock-garden dwarf.
10 to 12 in. B\&B $-\ldots 2.75 \quad 25.00$
18 to 24 in. B\&B.... $5.50 \quad 47.50$
-     - pygmaea (Pygmy)—3 ft. Compact small upright, irregular pyramid.
6 to 8 in. B\&B $\quad 2.50 \quad 20.00 \quad 160.00$ 10 to 12 in. B\&B.... $3.50 \quad 32.50 \quad 275.00$

Picea alcockiana (Bicolor) (Alcock Spruce)-70 ft. Zone IV. Broad pyramid with white stripes on dark needles.
15 to 18 in. B\&B.... $4.50 \quad 37.50$
-englemanni (Englemann Spruce)75 ft . Zone I. Wonderful native. Varies from green to steel blue. Dense and shapely. Heavy soil. Sold out.
-glauca - "Canadensis" - (White Spruce)-80 ft. Zone 1. Quickgrowing and shapely. In the northeast generally more satisfactory than Norway for forest planting.

* 6 to 9 in . S .-............ 12.00
* 9 to 12 in. X.
 25.00 18 to 24 in . B\&B.... $3.50 \quad 27.50$ ........
- -albertiana (Black Hills)-20 ft. Zone III. Better suited to dry climates than White Spruce. A majestic, bushy pyramid.
* 6 to 8 in. S......... .....- .-...... 15.00
* 9 to 12 in. X.-........-.-.-.- 32.00
*l2 to 18 in. XX ......-. .-....- 85.00
--conica (Dwarf Alberta)-Miniature in height ead leaf. 6 ft . Zone III. Tiny and slow. Probably the best true Dwaarf conifer.
9 to 12 in. B\&B.... $3.00 \quad 28.00 \quad 225.00$ 12 to 15 in . B\&B.... $4.00 \quad 35.00$
- -nana (Dwarf White Spruce)-8 feet, bushy, useful, hardy. 18 to 24 in. B\&B ... $5.50 \quad 50.00$

Picea koyamai (Koyamai Spruce)-50 ft. Zone V. Dignified from babyhood. A narrow pyramid with white stripes on dark needles.

* 6 to 10 in . X
20.00

2 to 3 ft . B\&B.... $5.00 \quad 45.00$
-orientalis (Oriental Spruce)-80 ft. Zone IV. Slow, compact, graceful. Humus. Dark needles.

* 8 to 12 in. X $\qquad$ 45.00 18 to 24 in. B\&B.... $5.00 \quad 40.00$
-polita (Tigertail Spruce) - 100 ft . Zone V. Handsome tree. Showy new spring growth.
18 to 24 in . B\&B.... $5.50 \quad 40.00$
2 to 3 ft . B\&B.... $7.50 \quad 60.00$
-pungens- 80 ft . Zone I. Best spruce for dry climates. Very tolerant. Varies from green to silver, as offered above.
* 6 to 9 in. S.............. ........ 15.00
* 9 to 12 in. X .-.............. 31.00
*10 to 15 in. XX ........ ....... 55.00 18 to 24 in . B\&B.... $3.50 \quad 27.00 \quad 230.00$
- -glauca (Blue Spruce)-A form of uniform silver sheen. Otherwise same as above.

18 to 24 in. B\&B.... $5.00 \quad 47.50$
——Kosteri (Koster Spruce)
——Moerheimi (Moerheim Blue)
Grafted forms of Blue Spruce. Scarce this season. A few large specimens, prices on request.


Photo: Spruces-1. Engelmann Spruce. 2. Omorika Spruce.
Spruce. 6. Norway Spruce. 7. (Dwarf) Alberta Spruce.
3. White Spruce. 4. (Dwarf) Gregoriana. 5. Pygmy 8. (Dwarf) Maxwell's Spruce. 9. Colorado and Koster.

[^7]

Photo: Pinus-2. Red Pine (resinosa). 3, 4. White Pine planting. 5. Excelsa. 6. Pinus cembra. 7. Austrian Pine. 8. Japan Red (densiffora). 9. densiffora umbraculifera. 10. Pinus strobus nana. 11. Pinus strobus.
12. Mugho Pine. 13. Scots Pine. 14. Red Pine (Resinosa).

## PINUS

Vary in size and shape but alike in one thing all thrive in windy spots and exposed locations.
 Pinus banksiana (Jack Pine) - 60 ft . Zone I. Broad tree with short and twisted needles. Dry, sandy soil. * 6 to 15 in. S
-cembra (Swiss Stone Pine)—30 ft. Zone IV. Slow. Dense pyramid. A fine small specimen tree.
8 to 12 in. $B \& B \ldots 3.00 \quad 25.00$
12 to 18 in. $B \& B$ _-.- $4.00 \quad 37.50$
-densiflora (Japan Red Pine)— 90 ft. Zone IV. Broad irregular head. Good near seashore.

$$
2 \text { to } 3 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \ldots . . \mathrm{F} .50 \quad 45.00
$$

- -umbraculifera (Japan Table Pine) 8 ft . Zone IV. Slow and dwarf. Also called "Tanyosho."
12 to 18 in. B\&B...- 4.5037 .50
-koreana (Korean Pine)—-50 ft. Zone III. Slow and dense. Handsome. 18 to 24 in. B\&B.... $4.50 \quad 37.50$
- -glauca (Blueleaf Korean Pine). Very rare form, fine color.

Prices on request.

## $\longrightarrow$ (Each) (10) (100)

Pinus montana mughus (Mugho)Zone I. 3 ft . Broad, low, bushy. Grown from seed, but larger sizes carefully selected low and compact.

* 6 to 9 in. X
30.00

8 to 10 in. XX.... ....... 80.00
12 to 15 in. $B \& B \ldots 3.00 \quad 25.00 \quad 195.00$
—nigra (Austrian Pine)-70 ft. Zone IV. Compact for a large tree. Neat. Likes lime. Seashore, but not on the water.

* 10 to 20 in. X.-... .....- ........ 35.00
*18 to 24 in. XX ....... ........ 60.00
18 to 24 in. B\&B...- 5.0040 .00
—parviflora glauca (Japan Silver Pine)-20 ft. Zone V. Small spreading tree with blue, twisted needles. Rare.
4 to 5 ft . B\&B.... $7.50 \quad 55.00$
—ponderosa (Western Yellow Pine)— 120 ft . Zone V. Huge tapered pyramid.
* 6 to 9 in . S
12.00
-resinosa (Red or Norway Pine)80 ft . Zone I. A fine native with long dark needles and spreading habit. Very easily grown. Few insect pests. Most popular.
* 6 to 9 in. S
13.50

18 to 30 in. XX
50.00

18 to 24 in. B\&B_-. $3.50 \quad 30.00$

Pinus strobus (White Pine) - 90 ft . Zone IV. The noblest native evergreen. Prefers rich soil. Light green needles, soft and dense. Subject to special interstate quarantines. We have growers in a dozen states and can ship almost anywhere.

* 8 to 12 in. X
15.00
* 12 to 15 in. X.
25.00
———pyramidalis (Pyramid White Pine) To 30 ft . Narrow, branches slope upward. Fine for specimen effects. 3 to 4 ft . B\&B.... 6.5055 .00
-sylvestris (Scots Pine) - 90 ft . Zone I. Large, stately tree. Useful for sandy, barren soils, but grows well in gardens. Prefers acid. Popular in small sizes for forest plantings.
* 6 to 8 in . S
12.00
* 12 to 15 in. S......... ............... 17.50

2 to 3 ft . B\&B.... $3.50 \quad 30.00$
-Thunbergii (Japan Black Pine) - 70 ft . one IV. The Picturesque pine you see in Japanese prints. Most valuable Pine for seashore planting. Can be set in sandy soil near spray.

* 6 to 12 in. $S$
15.00
* 18 to $24 \mathrm{in} . \mathrm{S}$.
30.00


## PSEUDOTSUGA <br> (Douglas Fir) <br> Listed, for conciseness, under Abies douglasi (page 44).



Kelsey Berrybush Yew

T. media Hicksi

T. cuspidata vermeulen


Taxus cuspidata nana


Specimen Taxus Capitata-Upright Yew

## TAXUS CUSPIDATA (Japanese Yew)

For any and every purpose in which Evergreens are required this Yew can be recommended. Perfectly hardy in New England and Ontario, immune from most diseases and pests. Accommodating to an extraordinary degree, withstanding shade or full sunshine. Dark green at all seasons of the year. This plant has been acclaimed "Asia's greatest gift to the gardens of America."
 Yew)-The natural form. Trees to 40 ft . The best type hedge Yew for all general purposes.

-Cuspidata (Spreading Yew)-Commonly offered as "cuspidata." 6 ft . Zone III. A spreading open bush.

* 4 to 6 in. X........ .....- ........ 30.00 6 to 8 in. X $\quad 50.00$ 15 to 18 in. B\&B.... $5.00 \quad 45.00$
- Columnaris (Columnar)12 ft. Narrow and dense. Needs some pruning.
18 to 24 in. $B \& B$.... $6.60 \quad 55.00$


Taxus cuspidata intermedia (Improved Yew) - 10 ft . Like Bush Form, but denser foliage and neater.

* 6 to 8 in. X........- .....- -........
33.00

15 to 18 in. B\&B-.-- 5.0047 .50
.........
——Jeffreyi (Jeffrey's Pyramidal Yew) A fine plant. Very narrow and upright in growth. One of the best of the new column types introduced so far.

* 4 to 6 in . X
30.00

30 to 36 in. B\&B.... $7.00 \quad 67.00$

- -nana ("brevifolia") (Dwarf Yew) 4 ft . Zone III. Slow growing, spreading, dense dark foliage. Picturesque. Substitute for Dwarf Boxwood.
* 6 to 8 in. X.--...-.-.-.......
33.00

12 to 15 in . B\&B.... $4.00 \quad 36.00$

Taxus cuspidata densa - Very low, dwarf mound, with short ascending branches. Handsome rock-garden gem.
$\begin{array}{llrrr}\text { * } 4 \text { to } 6 \text { in. X........... } & 6.00 & 50.00 \\ 8 \text { to } 10 \text { in. B\&B } & 2.50 & 22.50 & -.--. . .\end{array}$

- -nana femina- A heavy berrybearing type of the dwarf Yew with good foliage and good growing habit.
* 4 to 6 in. X .-..... ...... 3.50
30.00
--ovata-Broad, upright in habit, large dark leaf and is unusually attractive throughout the year, especially in fall. Very heavy producer of red fruit. Zone IV.
15 to 18 in. $\mathrm{B} \& \mathrm{~B}$.... $3.50 \quad 30.00$
- Thayeri - Broad, flat, spreading bush, light green.
15 to 18 in. $\mathrm{B} \& \mathrm{~B} . . .5 .00 \quad 45.00$
- -vermeulen (Vermeulen's Yew)12 ft . Zone III. New. Compact and dense. Broad base and narrow top. Beautiful pyramid with more red berries than most. Short needles.
* 4 to 6 in. X._.......... $3.50 \quad 30.00$
* 6 to 8 in. X.-.-......... ........ 33.00

8 to 10 in. $X$.-........... ........- 60.00
10 to 12 in. X._-.................... 77.00
*12 to 15 in. XX
21 to 24 in . $\mathrm{B} \& \mathrm{~B} \quad 5.00 \quad 47.50 \quad \ldots$

[^8]Taxus baccata (English Yew)-30 ft. Zone VI. Spreading and, in old age, a large shrubby tree.

* 8 to 10 in . X
37.50

12 to 15 in. X 3 to 4 ft . B\&B.... $7.00 \quad 65.00$

- Compacta (Neater Yew) - Also tree-form, upright branches, but smaller leaf and only to 5 or 6 feet height. Much more useful than baccata.
* 6 to $8 \mathrm{in} . \mathrm{X} \quad 5.00 \quad 35.00$ $\begin{array}{lllll}10 & \text { to } 12 \mathrm{in} \text {. B\&B } & 2.50 & 20.00 & 150.00\end{array}$ 2 to $21 / 2 \mathrm{ft}$. B\&B.... $5.50 \quad 50.00 \quad 450.00$
- -fastigiata (Irish)-20 ft. Zone VI. A full column with great character and ruggedness.
* 8 to 10 in X X $\quad . \quad 5.00 \quad 40.00$ 12 to 15 in. B\&B-... $3.00 \quad 25.00 \quad 200.00$ 18 to 24 in. B\&B-... $5.00 \quad 45.00 \quad 400.00$
- -repandens (Creeping) - 3 ft . Zone V. Very slow and hugging the ground. Dense nature. Rock-garden.
*12 to 15 in. X. 12 to 15 in . B\&B.. $2.75 \quad 25.00 \quad 200.00$
- Washingtoni (Golden)-8 ft. Zone VI. Surprising yellow leaves on a broad bush.
15 to 18 in. B\&B.. $4.50 \quad 40.00 \quad 350.00$

Taxus canadensis stricta (Native Yew)-2 ft. Zone II. Dense ascending, stiff branches make this desirable for low edging.

* 4 to 6 in................. $4.00 \quad 35.00$

15 to 18 in. B\&B.. $4.50 \quad 40.00 \quad 375.00$

## Collection of 8 Dwarf Yews

Two each of 4 different kinds, can be used for varied foundation or garden plantings in a dozen ways.

All twice or three times transplanted, heavy little trees. Roots packed in damp moss for safe shipment.
Kelsey Yew, 8 to 12 in .
Hick's Yew, 8 to 12 in .
Dwarf Yew (nana), 8-12 in.
Vermuelen Yew, 8-12 in.
2 each: ( 8 plants) for $\$ 13.00$.

Taxus media Hatfieldi (Hatfield's Yew) 12 ft . Zone IV. A compact cone in outline. The branches are upright. Full of character.

* 4 to 6 in . X.
$3.75 \quad 30.00$
18 to 24 in . B\&B.. $5.00 \quad 45.00 \quad 395.00$
- -hicksii (Hicks)—lo ft. Zone IV. Strong, fat upright shrub. Fine for hedges. Good berries.

| 4 to 6 in . X |  | 3.75 | 30.00 |
| :---: | :---: | :---: | :---: |
| 6 to 8 in . X |  |  | 35.00 |
| 8 to 10 in . X |  |  | 50.00 |
| 15 to 18 in . XX |  | 15.00 | 125.00 |
| 2 to 3 ft . B ¢ ${ }^{\text {c }}$ | 5.50 | 50.00 | 450.00 |

- -Kelseyi (Berrybush)--8 ft. Zone IV. Our introduction 1936 and attracting favorable comment everywhere. Propagated from the point of view of its wealth of red berries in autumn. Bears young and grows slowly. A dense, full bush. Needles like the Dwarf Yew.



## At Last!



Pyramid Yew

Pillar Yew Sentinel Yew Narrowbush Yew

Out of thousands of unusual media seedlings, 30 promising ones were selected in 1932. After twelve years, these six new varieties are all that proved truly worth while. All have given no problems in hardiness nor in growing habits, which are substantially as sketched above. (Occasional pruning of out-of-shape branches is needed, but only occasional-the natural shape is as described.) Hardiness not determined, but Zone V at least.

Now Available: 4 kinds below, 12 to 15 inch $B \& B \$ 5.00$ each. $21 / 4$ inch pots, 10 for $\$ 9.00$.

TAXUS media, Pyramidalis (The Pyramid Yew)-Fastest growing of the new kinds, vertical branches and blackgreen needles. Probable 15 ft . height. A rich, showy, full-bushed column.

- Pyramidalis robusta (Obelisk Yew) Even faster growth, probably to over 20 ft . Otherwise the same.
——stricta (Narrowbush Yew)—Needles short and thin, giving a compact effect, vertical branches and dwark, narrow shape. Probable height 6 to 8 feet.
- -stricta viridis (Grassgreen Yew)Similar in every way to stricta, except the needles, which are larger and gay bright green winter and summer.

Available Fall 1946: 3 kinds below, size and price to be announced in Fall 1946 catalog.
TAXUS media Sentinalis (Sentinel Yew) The oddest, most surprising shape of all. Just sufficiently clothed with needles to hide the center stem. Probable height 12 to 15 feet.

- -pilaris (Pillar Yew)-The long needles are quite narrow and medium dark. Shape is as narrow as could be desired-about half-way between Pyramid Yew and Sentinel Yew. Branches slope upward; are short. Probable height 12 to 15 feet.
> - -pilaris grandifolia (Bigleaf Yew). Exactly similar in shape and growth, but the needles are enormous, almost as large as Sciadopitys. The effect is rich and unusual.


Pyramid Yew 16 ft. 1

THUJA (Arborvitae)
American Arborvitae is the one dwarf group of evergreens which prefers the extreme north. Arborvitae grows in any good soil and even withstands poor drainage. For best results it should be pruned neatly to keep the bottom broader than the top.


Thuja Koraiensis (Korean A.V.) Low spreading shrub. Hardy. Zone V. Interesting, unusual evergreen.
12 to 15 in. X .
$6.50 \quad 55.00$
-occidentalis (American Arborvitae) 30 ft . Zone II. Pyramidal tree with dense, frond-like, evergreen leaves. Popular.

* 6 to 8 in. S......
14.00
* 12 to 18 in . XX.
*18 to 24 in . XX 65.00 $\begin{array}{lllll}18 & 15.00 & 120.00\end{array}$ 18 to 24 in. B\&B.... $3.50 \quad 27.50 \quad 225.00$
- Columbia (White Tipped) - 20 ft . Zone IV. Interesting foliage, dotted with silver.

| 12 | to $15 \mathrm{in} X$. | $6 . .$. | 60.00 |
| :--- | :--- | :--- | :--- | $\begin{array}{llllll}2 \text { to } & 3 \mathrm{ft} . & \mathrm{B} \& \mathrm{~B} & 3.50 & 33.00 & 300.00\end{array}$

- -douglasi (filiformis)- 15 ft . Zone IV. Crested, thready foliage. Quite unusual. Very néat grower. Sold out.

Thuin oecidentalis elegantissima (Golden Tip) - 15 ft . Zone II. Bright green in winter, gold in spring.

* 8 to 10 in . X
25.00 $\begin{array}{lllll}18 & \text { to } 24 \mathrm{in} \text {. B\&B.... } & 3.00 \quad 23.00 \quad 200.00\end{array}$
- -ellwangeriana (Tom Thumb) - 4 ft . Zone II. Two kinds of leaves give feathery appearance.
6 to 8 in. X
18.00 $\begin{array}{lllll}18 & \text { to } 24 \mathrm{in} . & \text { B\&B.... } & 3.50 \quad 27.00 \quad 250.00\end{array}$
-     - globosa (Globe)—4 ft. Zone II. Maintains itself well under all conditions and hods its shape without trimming.
* 6 to 8 in. X. ... $\quad 25.00$
${ }^{*} 10$ to 12 in. X
15 td 18 in. $B \& B \quad 3.50 \quad 30.00 \quad 250.00$
——Little Gem-2 ft. Zone II. Really dwarf-hugging the ground. Rockgarden plant. Dark green. 9 to 12 in. B\&B $\ldots . .2 .50 \quad 20.00$ 12 to 15 in. B\&B -... $3.00 \quad 25.00 \quad 195.00$
- -nigra (Dark Green Arborvitae) A form exactly like Thuja occidentalis except the foliage is rich, showy. Very fine.
18 to 24 in. B\&B .. $3.00 \quad 25.00 \quad 200.00$
- -pyramidalis (Pyramidal) - 25 ft . Zone II. This is perhaps the best tall form of American Arborvitae. Formal, narrow hedges.


Thuja occidentalis lutea (Peabody)15 ft . Zone II. Bright yellow column.

* 6 to 8 in. X.
$4.00 \quad 20.00$
*10 to 12 in. X............. ........ 30.00
18 to $24 \mathrm{in} . \mathrm{B} \& \mathrm{~B} \ldots .3 .00 \quad 23.00 \quad 195.00$
--vervaeneana (Vervean) - 10 ft . Zone II. Broad, bushy pyramid. Color varies from gray-green to yellowish and in winter to bronze.
*10 to 12 in, X.......... $6.00 \quad 50.00$ $\begin{array}{lllll}18 & \text { to } 24 & \text { in. } B \& B & 3.00 & 23.00 \\ 195.00\end{array}$
- -wareana (Siberian)-12 ft. Zone II. A broad cone, dense and bushy. Slow. Stands exposure. Foliage heavy crested.
* 8 to 10 in . X $\quad$-............. 25.00 15 to 18 in. $\mathrm{B} \& \mathrm{~B} . . .3 .00 \quad 26.00$
—Orientalis (Oriental) (Biota) - 25 ft . Zone VI. Fast growing column with leaves "set on edge." Interesting, useful. Bronze in winter.
*1-year S
6.00

2 to $3 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \ldots . . \begin{array}{llll}4.00 & 35.00 & 300.00\end{array}$

- -aurea nana (Berckman) - 5 ft . Zone VI. A gorgeous dwarf-rich, lush. Golden in spring; bronze, winter.
* $21 / 2$ in. pots_-................. 35.00

24 to 30 in. B\&B.... $4.50 \quad 37.50 \quad 350.00$


Thuja in photo: 2. T. Orientalis. 3. Tom Thumb Arborvitae. 4. Orientalis aurea nan. 5. Hovey's Arborvitae. 6. Warreana (Siberian). 7. Pyramidal Arborvitae. 8. Globe Arborvitae. 9. Golden fip Arborvitae. 10. The Type-Thuia occidentalis.: .. 11. Verveaneana.
12. "Little Gem".
13. Douglasi aurea.

One of the most useful of all evergreens. In dry or wet soils, in sun or shade.


Tsuga canadensis (Northern Hem-lock)-60 ft. Zone IV. In forests, a noble patriarch, but readily sheared to hedge or modest specimen sizes. Humus. Stands shade. The most beautiful native evergreen.

* 6 to 8 in. S
* 12 to 15 in . X
* 18 to 24 in. XX

18 to 24 in. B\&B


Sargent Weeping Hemlock

Tsuga caroliniana (Carolina Hem-lock)-50 ft. Zone V. Damp, acid preferred. Dense. Striking shadows. Drooping.

* 6 to 9 in $S$ $\qquad$ 9.00
* 12 to 15 in. B\&B
.--...... 12.0095 .00
24 to 30 in . B\&B
4.5037 .50
-diversifolia (Japanese Hemlock) - 70 ft . Zone V. Graceful, handsome pyramid. Dark, crowded needles.
2 to $21 / 2 \mathrm{ft}$. B\&B
7.00
—sieboldii (Siabold Hemlock)To 70 ft . but usually smaller. Zone V. Horizontal branches, oval head.
2 to 3 ft . B\&B
4.5037 .50

3 to 4 ft . B\&B


Specimen Tsuga canadensis

## Why Plant Evergreens Small?

Because they are far cheaper than large ones, yet are easily and çuickly grown into specimens. We will try to explain this sentence as simply as we can:

Nature grows evergreens in any ordinary garden. The only thing you must do is to keep them shapely and bushy. Most evergreens (Chamaecyparis, Juniperus, Taxus, Thuja, Tsuga) are shaped when young by cutting back long side branches to an even length and tying the stem to a stake if the plant is too weak to support itself. This induces a stiffer main stem and more short side branches - the tree grows straight and bushy. Such cutting is done in May and it is almost impossible to hurt a young evergreen by too much pruning.
Abies, Picea and Pinus are entirely different. Shaping consists of merely removing the top bud with knife or

## EVERGREENS GROW FAST

Sometimes large evergreens can be planted and at once take hold and grow at good speed, but frequently they are stunted by the shock of transplanting. One customer writes: "My neighbor paid $\$ 30$. apiece for 12-foot specimen Red Pine; I bought 18-inch XX (no earth ball) the same year. Today ( 12 years later) my trees are larger than his!" Such experiences are not uncommon, though usually not so extreme. Here are
fingers in May if bushier trees are desired, or cutting all the new "candle" growth in half just as it is hardening in June, if dwarfing is desired. Disbudding is also done to any ex-tra-long side shoots to keep the tree belanced.

some average rates of growth (inches per year):*

Abies concolor -douglasi Juniper Pfitzer 15 -Sargent 10 -virginiana 11 Picea glauca 12 --conica 2 - excelsa 13 Thuja occid 11 —pungens 11 Tsuga canad. 12 * Small transplants grow at $1 / 2$ this rate, the first two years.


## COSTS OF SHIPPING

Evergreens vary enormously as to weight, even plants of the same height, so exact figures can never be given before digging. Average figures, however, are about as follows:

| Size | Packing | Weight |
| :---: | :---: | :---: |
| 4 to 8 in. S | none | 1 oz . |
| 6 to 10 in . X | none | 3 oz |
| 10 to 18 in. X | none | 6 oz . |
| 12 to 24 in . XX | none | $3 / 4 \mathrm{lb}$. |

(Packing is charged on above, however, unless cash accompanies order)
(1) (10)

1 to $2 \mathrm{ft} . \mathrm{B} \& \mathrm{~B}$
2 to 4 ft . $B \& B$
$\$ .25 \$ 1.00 \quad 60 \mathrm{lb}$.
4 to $6 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \quad 1.00 \quad 2.50 \quad 90 \mathrm{lb}$.
6 to $8 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \quad 1.25 \quad 5.00 \quad 200 \mathrm{lb}$.

## part VI <br> DECIDUOUS




## "TREES'

are plants that continue to grow fromethe top buds. Usually, therefore, have only one or two main stems or trunks. The pruning of a tree should not interfere with this tip growth.

## 'DECIDUOUS'

means losing its leaves every winter. Such plants then become dormant (sleeping) and make late fall and spring transplanting easy. Usually no earth ball is necessary, even in reasonably large sizes.

Cercis


Fagus Riversi Purple Beech)



## TREES

ON these 8 pages is an alphabetical list of deciduous trees－a short list of the better kinds only．Many sorts not listed can be quoted on request．Other deciduous trees will be found under Fruits and Nuts beginning on page 60．Small，bushy trees are included in this list，though some of them come close to being classifiable as large shrubs（there is no clear dividing line）．We try to simplify，e．g．，all Maples，even dwarf forms，are here among trees－while all Vibur． nums，even tree－like kinds，are listed as shrubs．



FLOWERING TREES
$x=$ Hower；$O=$ truit


## Trees Grow Quickly

Few amateurs of trees realize how soon a 5 or 6 foot tree becomes large enough to make a show in the landscape．Of course，such＂hurry－trees＂as Ulmus pu－ mila，Poplars and Willows are famous for rapid growth－but among trees known to have reached 30 feet or more in their first 15 ，years of life are such supposed＂slow＂growers as Red Oak， Pin Oak，most Maples，Liriodendron， several Birches，Black Locust and Amer－ ican Linden．

## Plan Ahead－Plant Now

Since a young tree requires little care， and is much less expense and trouble to plant than a large one，it pays to plan ahead．Order and set out NOW the trees you will need in your plans for the future．A special list of bargains for such use is made on page 15－large enough to be out of the baby stage，yet young enough to be inexpensive to buy and ship．

## Shipping Costs Low

Generally speaking，of the three grades illustrated above，the two smallest cost $10 \%$ of the price for expressage；the largest $15 \%$ ．

## SHADE TREES <br> a table to help in selecting

| KIND OF TREE | TOLERANCE |  |  | FAULTS |  |  | VIRTUES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Ho } \\ & \text { O } \\ & \text { م } \\ & \hline 0 \end{aligned}$ | 萬落 |  |  |  |  |  | $\begin{aligned} & \overleftarrow{U} \\ & \mathbb{U} \\ & \mathbb{E}_{4}^{0} \end{aligned}$ |  |
| ACER Negundo（Box－elder） <br> A．platanoides（Norway Maple | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | 4 |  |  |
| A．rubrum（Red Maple）．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | $\cdots$ | $\ddot{\chi}$ | $\times$ | $x$ | － | － | x | $\cdots$ |  |
|  | $\ddot{x}$ | X | $\cdots$ | $\times$ | $\cdots$ | $\cdots$ | $\times$ | ． | $\times$ |
| BETULA alba（Birch）．．．．．．．．．．． | $\times$ | － | － | －• | X | － | X | － | $\because$ |
| B．populifolia（Gray B．） | $\times$ | $\ddot{x}$ | $\cdots$ | $\cdots$ | x | x | － | $\bullet$ | $x$ |
| B．papyrifera（Canoe B．） | 入 | 入 | － | $\cdots$ | X | X | X | $\ddot{*}$ | $x$ |
| B．lenta（Sweet Birch）．．．． |  | － | $\cdots$ | － | $\cdots$ | － | － | X | $\times$ |
| CELTIS（Hackberry） | x |  |  |  |  | ． | － | － | ． |
| CLADASTRIS（Yellow－wood） | x | － | － | － | － | － | － | － |  |
| FAGUS（Beech）．．．．．．．． |  |  |  | $\because$ | － | － | － | － | $\times$ |
| FRAXINUS（Ash） | ． | $\ddot{\chi}$ | $\ddot{\chi}$ | X | － | － | $\ddot{\chi}$ | ． | X |
| GINGKO biloba |  |  |  | － | －＊ | ． | X | $\because$ | － |
| GYMNOCLADUS（Coffee－tree） |  | － | X | － | $\bullet$－ | － | X | X | － |
| PLATANUS occidentalis（Sycamore） |  | $\times$ | － | 。 | ． | 。 | － | $\times$ | － |
| P．acerifolia（Oriental Plane）．．．．．．．．．．．． |  | x | $\ddot{x}$ | －• | ＊＊ | ． | － | $\cdots$ | ． |
| POPULUS（Poplar－most kinds）．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | $\ddot{\chi}$ | $\times$ | X | $\ddot{\chi}$ | $\ddot{\chi}$ | $\ddot{x}$ | $\times$ | $\bullet$ | － |
| QUERCUS palustris（Pin Oak） |  | X |  | 天 | X | X | $\times$ | － | － |
| Q．coccinea（Scarlet Oak）．．． | $\ddot{x}$ | $\times$ | $\cdots$ | ＊ | －• | － | $\times$ | － | － |
| Q．Iubra（Red Oak） | $\times$ | $\ddot{X}$ | － | ＊ | － | － | － | － | － |
| SALIX（Willow－most kinds） |  | $\times$ |  | $\times$ | X |  |  | － | － |
| TAXODIUM（Bald－cypress） |  | X |  |  | X | － | $\times$ | ＊ | $\because$ |
| TILIA（Linden－most kinds）． | － | 入 | $\bullet$ | － | － | ． | $\times$ | $\times$ | $\times$ |
| ULMUS campestris（English Elm） |  |  | X |  | ． | ． | X | －• | X |
|  |  | $\ddot{x}$ | $\times$ | x | $\cdots$ | － | ＊ | － | － |
| U．pumila（Siberian Elm）．．．．a．．．．．．．．．．．．．．．．．．．．．．．．．．．． | X | X | － | x | － | $\cdots$ | $\ddot{x}$ | $\cdots$ | － |

## DECIDUOUS TREES (Alphabetical)

## ACER

Acer dasycarpum (Silver Maple-100 ft. Zone IV. Good quick shade. Leaves bright silver below.

* 2 to 3 ft................. ........ 6.50

6 to $8 \mathrm{ft} . \ldots-\quad . \quad . \quad . \quad 2.25 \quad 18.00 \quad 150.00$
-palmatum atropurpureum (RedLeaved) - 10 ft . Wine-red leaves. Bushy, compact. Any sheltered soil. In time, becomes an open tree-like shrub.
15 to 18 in. B\&B ... ..... 25.00
21 to 24 in. B\&B ... $5.50 \quad 47.50$
--dissectum purpureum ( Cut . Leaved Purple)-6 ft. Billowy mound of lacy color. The dwarfest.
12 to 15 in. B\&B.... ...... 20.00
15 to 18 in. B\&B.... $3.50 \quad 30.00$
—platanoides (Norway Maple) - 60 ft . Zone IV. Dense, round-headed. Excellent for city streets. Easily grown Bad in gardens, because of greedy roots.
4 to 6 ft . $\qquad$ $\begin{array}{rrr}--\cdots-\cdots & -\cdots . . . . & 45.00\end{array}$
8 to $10 \mathrm{ft} . \ldots-\ldots . . . . \quad 5.00 \quad 39.00 \quad 350.00$
——iastigiata (Pyramidal Norway Ma-ple)-Fine narrow column form.
4 to 5 ft . $\qquad$ $5.50 \quad 50.00$

- -schwedleri (Schwedler) - 60 ft. Zone IV. The type with colored leaves - purplish-red, fading to green.
6 to $8 \mathrm{ft} . . . . . . . . . . . . .6 .5057 .50$
-rubrum (Red or Swamp Maple)-80 ft. Zone IV. Majestic drooping pyramid Red flowers in April. Wet land, but tolerant of drainage.

- Columnare (Columnar Maple) Tall pyramid. Rare, beautiful.
4 to $5 \mathrm{ft} . . . . . . . . . . . . .-7.0065 .00$
—saccharum (Sugar Maple) - 100 ft Zone III. Hates smoky cities. Heavy dense, regular pyramid. Autumn color. The most effective country landscape shade tree there is. Bold and dark at a distance.
 4 to 6 ft.............- .....-. $6.00 \quad 40.00$ 6 to $8 \mathrm{ft} .----\quad-\quad . \quad 2.00 \quad 10.00 \quad 65.00$


## AESCULUS

Aesculus hippocastanum (Flowering Horsechestnut)-50 ft. Zone V. Stately pyramid. White flowers in late May. Deep damp soil.
6 to 8 ft $\qquad$ $5.50 \quad 45.00$

- -rubicunda (Carnea) (Red flower-ing)-Slightly smaller, flowers pink 4 to $5 \mathrm{ft} . . . . . . . . . .--.-7.5065 .00$


## BETULA

Betula alba (European White Birch)40 ft . Zone III. Good white bark. Spreading.

* 4 to 5 $\qquad$ 3.5
$12.50 \quad 110.00$
6 to 8 ft
- -laciniata (Cutleaf Weeping)-Like above, but drooping branches and lacy, drooping leaves. The effect is superb on a lawn. Only fault: Hard to move large trees.
5 to 6 ft .
$4.50 \quad 37.50$
6 to 8 ft
$5.50 \quad 42.50$
-lenta (Sweet Birch)-75 ft. Zone III. Humus, drainage. Fine pyramidal specimen; or for woods. Dark brown bark.
* 2 to 3 ft................... $2.50 \quad 12.50$ 6 to $8 \mathrm{ft} . . . . . . . . .-. .-2.00 \quad 10.00 \quad 60.00$
-nigra (River Birch)—80 ft. Zone III. Brown papery bark, graceful form. Moist, sandy soil
* 2 to 3 ft............... $2.50 \quad 12.50$ 6 to $8 \mathrm{ft} . . .-\cdots-\quad 2.25 \quad 20.00$
-lutea (Yellow Birch) - 75 ft . Zone III. Smaller, but for cool, moist places. * 2 to 3 ft ........-- $-\cdots-\quad 3.50 \quad 15.00$ 8 to $10 \mathrm{ft} .-\ldots-\ldots-\ldots . \quad 4.50 \quad 37.50$
—papyrifera (Canoe or Paper Birch) 80 ft . Zone I. Whitest bark of all. but yellowish when young. Handsome.
* 2 to 3 ft...........-- ......- ........- 12.50
 6 to $8 \mathrm{ft} .--.-\ldots-\quad 3.50 \quad 25.00 \quad 195.00$
-populifolia (Gray Birch)-30 ft. Zone III. The common clump of "white" birch in woods. Poor soil

 6 to $8 \mathrm{ft} . \ldots-\ldots . . . \quad 2.00 \quad 10.00$
60.00

Fagus sylvatica pendula, the weeping Beech. A noble lawn specimen where room permits its use.
 Scarlet in autumn.

* 12 to 18 in.
7.50

4 to 5 ft .
$9.00 \quad 65.00$

## CARY

Carya laciniosa (Shellbark Hickorv) 100 ft . Zone V. Wet, rich soil.

-ovata (Shagbark Hickory) - 80 ft Zone IV. Light; drained soil

65.00

## CATALPA

Catalpa speciosa (Western Catalpa) -80 ft. Zone IV. Handsome pyramid. Spotted white in June. Showy Timber durable in water.

* 18 to 24 in.
7.50

5 to 6 ft .
$9.00 \quad 50.00$

## CELTIS

Celtis occidentalis - 100 ft . Zone II Good straight timber, handsome Moist. Stands city.

* 12 to 18 in.

6 to 8 ft $\qquad$ $3.50 \quad 22.50$
180.00

## CERCIS

Cercis canadensis (Red Bud)-20 ft Zone V. Rosy pink buds cover bare branches in April. Humus. Beautiful. Part shade.

* 12 to 18 in. $\qquad$ -....8.00 * 2 to 3 ft $\qquad$ $1.50 \quad 12.50$ 15.00 3 to 4 ft . 65.00 - -alba (White Bud)-Rare, beauti ful white-flowered form of above. 4 to 5 ft . $5.50 \quad 45.00$


## CHIONANTHUS

Chionanthus virginica (White Fringe) -25 ft . Zone V. Fragrant white tas sels in May. A slow tree, but worth waiting for. Watch drainage-must be good.
5 to 6 ft
$3.50 \quad 27.50$

## CLADRASTIS

Cladrastis lutea (Yellow-wood) - 50 ft Zone IV. Fragrant, white in June Stands drought. Deen roots.

* 12 to 18 in.
3.00
15.00

5 to 6 ft . $\quad 5.00 \quad 45.00$

## CORNUS

Cornus florida (Flowering Dogwood) 25 ft . Zone IV. Very showy white in May, large red berries October on. Acid, humus. No more sensational sight than a group in bloom

* 12 to $18 \mathrm{in} . \mathrm{S} .$.
15.00
* 2 to 3 ft . S... 3 to $4 \mathrm{ft} . \ldots \ldots \ldots \quad 2.00 \quad 16.00 \quad 125.00$ 4 to $5 \mathrm{ft} .-\ldots . \quad-\quad 2.75 \quad 20.00 \quad 160.00$ 8 to $10 \mathrm{ft} . \ldots-\ldots . . . . \quad 4.50 \quad 37.50 \quad 325.00$
- -pendula-Weeping form. (White.)
18 to 24 in .
$2.75 \quad 25.00$
4 to 5 ft .
4.5042 .50
- -plena (Double Dogwood) - Rare form with showy double white bloom. Fine
4 to 5 ft .
4.75
45.00
-—rubra (Pink flowering) -Pink flowers. No real red is known, but the clear pink is a beautiful tone. Plant in with whites.

5 to $6 \mathrm{ft} . .-\ldots . .-\ldots . .-5.90 \quad 47.50 \quad 400.00$ 6 to $8 \mathrm{ft} . \ldots-\quad-\quad . \quad 8.00 \quad 60.00 \quad 500.00$

- -xanthocarpa - Exactly like the type, but berries are yellow and birds don't remove them so rapidly. 3 to 4 ft .
$3.75 \quad 35.00$
-kousa (Japan Flowering Dogwood) -20 ft . Zone V . Like our native C . florida, but in June and more tolerant. Bushier
4 to $6 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} \quad 7.50 \quad 60.00$
--chinensis-Form of Kousa with larger, whiter flowers
24 to 30 in. B\&S.-.- 4.5037 .50
-mas (Cornelian Cherry)-20 ft. Zone V. A yellow cloud in April. Scarlet berries August. Tolerant.
4 to $5 \mathrm{ft} . . . . . . . . . . . . . \quad 3.00 \quad 25.00 \quad 200.00$


Photo Birch Clumps: - B. papyrifera is brown when young but whiter and more long-lived when mature. Populifolia is for quick effects. Two or more trees in one hole give clump effect quickest and cheapest.


## CRATAEGUS

Crataegus coccinea (Thicket Haw-thorn)-10 ft. Zone III. White in May. Berries dull red. Relished by birds.

* 12 to 18 in.
10.00
$\begin{array}{lllll}3 \text { to } 4 \mathrm{ft} . & & 3 . & 30.00 & 250.00\end{array}$
-cordata (Washington Thorn)-20 ft. Zone V. Round head, bushy. Red fruit all winter. Good fall color.
2 to 3 ft ................ $25.00 \quad 195.00$
5 to $6 \mathrm{ft} . . . . . . . . . . \quad 5.50 \quad 47.50$
-crusgalli (Cockspur Thorn)-20 ft. Zone IV. Fine hedge. Red berries all winter. Very thorny. Drain.
3 to 4 ft $\qquad$ $3.50 \quad 27.50 \quad 225.00$
-oxycantha (May Tree: English Haw) -20 ft . Zone V. Showy white flower in May, fragrant. Red autumn fruit. An excellent hedge plant.
*18 to 24 in . $\qquad$

$$
5.00
$$

35.00

$$
3 \text { to } 4 \mathrm{ft} . . . .
$$

——splendens (Paul Scarlet Haw-thorn)-Form with showy red flowers. Red berries. Prefers sun, lime and heavy soil -even clay. In light soils, manure.


## FAGUS

Fagus americana (American Beech)80 ft . Zone V. Lime, drainage. Gray bark, majestic drooping form. Slow. 18 to 24 in
4 to 5 ft .
$10.00 \quad 75.00$

6 to $8 \mathrm{ft} . \ldots \quad 3 . \quad 3.00 \quad 25.00 \quad 195.00$
-sylvatica (European Beech)-80 ft. Zone V. Smaller, darker leaves Lime, drain. Very slow. Dense shade.
4 to 5 ft . B\&B.... $7.50 \quad 65.00$

- -fastigiata (Column)-Narrow, upright branches. Grows 30 ft . high; 6 ft. wide.
* 3 to 4 ft ...-. ....... 4.0035 .00

4 to 5 ft ........... 9.00

- -pendula (Weeping) - A 50-foot mound of green leaf and gray branchlet. Unique and striking. Picturesque
5 to 6 ft . B\&B.... 20.00
- -purpurea (Copper)-Like the type but with rich color. Tends to grow shapely. The color varies during summer and is not unnatural in effect.

Sold out.

- -Riversi (Purple)-Darker, redder leaf than purpurea.
4 to 5 ft . B\&B.... $12.50 \quad 115.00$
- -tricolor-Leaves green, red and white. Attractive, as well as odd. 18 to 24 in. $B\{B \ldots 6.50 \quad 55.00$


## FRAXINUS

Fraxinus americana (White Ash) - 100 ft. Zone II. Handsome, vigorous. Autumn color. Damp or dry.
 6 to $8 \mathrm{ft} . .-\ldots-\ldots . . . . . . . .2 .50 \quad 15.00 \quad 90.00$
-lanceolata (Green Ash) - 60 ft . Zone II. Useful tree. Prefers heavy damp soil, but tolerant.
6 to $8 \mathrm{ft} . \ldots-\ldots . . . . . . . .2 .00 \quad 17.50 \quad 95.00$

## GINKGO

Ginkgo biloba (Maidenhair Tree)100 ft . Zone V. Slow, but tolerant of any condition-including smoke.


## GLEDITSIA

Gleditsia triacanthos (Honey-Locust)100 ft . Zone V. Rich soil, sun. Good timber and good stock feed.
*3 to 4 ft $\qquad$ $3.75 \quad 27.50 \quad 250.00$


Halesia tetraptera (Great Silverbell)25 ft . Zone V. Profusion of white bells nod in May. Ācid, humus.
4 to 5 ft .
ft....-
$1.75 \quad 15.00$
6 to 8 ft
$3.75 \quad 25.00$

## JUGLANS

Juglans nigra (Black Walnut) (See also Page 65)-120 ft. Zone IV. Rich, moist. Majestic, with good timber, handsome leaf and delicious nuts. The following are seedlings. *12 to 18 in.............. ......- .------- 12.00


-cincerea (Butternut)—75 ft. Zone III Less handsome, but good.
*2 to 3 ft .--..-.........-. ...--- $3.00 \quad 15.00$

—sieboldiana-65 ft. Zone IV. Fine vigorous tree, bearing tasty nuts, rather like Brazil nuts.
*3 to 4 ft . $\qquad$ $4.50 \quad 40.00$


Photo: Life size fower and buds of Franklinia.

## FRANKLINIA Alatamaha ('Gordonia')

Ben Franklin's tree
35 ft . Zone VI. Large white and yellow blooms fragrant from August to frost. Damp, acid, heavy, humus, blooms best in sun. Blooming starts on small plants. An extraordinary native. Leaves bright red in autumn--often while white flowers still open. The only flowering tree that blooms in late fall. Unlike most trees, small sizes need more "nursing" than larger sizes.

|  | (Each) | (10) | (25) | (100) |
| :---: | :---: | :---: | :---: | :---: |
| 8 to 10 in. (pot) | ...... | 9.00 | 18.75 | 70.00 |
| 12 to 18 in |  | 18.50 | 37.50 | 150.00 |
| 3 to 4 ft . | 4.50 | 40.00 | 85.00 | 300.00 |
| 5 to 6 ft. B\&B | 7.50 | 67.50 |  |  |
| 6 to 7 ft . B\&B | 8.50 | 77.50 |  |  |

[^9]
## MAGNOLIA

Magnolia acuminata (Cucumber Tree) - 80 ft . Zone V. Handsome pyramid, fragrant yellowish flower, May; handsome red fruit, September. Humus, manure.
3 to 4 ft . B\&B.
$5.00 \quad 45.00$
-glauca (Swamp Laurel)—16 ft. Zone V. Prefers moist, but tolerant. Semievergreen. White blooms scattered from June to August. Very fragrant. 18 to 24 in. $\qquad$ .....- $15.00 \quad 95.00$ 3 to 4 ft $\qquad$ $\begin{array}{llll}2.50 & 20.00 & 175.00\end{array}$
5 to 6 ft $\qquad$ $9.00 \quad 85.00$
-Kobus-25 ft. Zone V. White, April to May. A real show after a few years. Fine growth. Hardiest oriental Magnolia.

* 3 inch pots. $\qquad$ 9.50
18 to 24 in.
3.00
25.00
-soulangeana (Saucer Magnolia) 20 ft . Zone V. Late April show of large, pink blooms, white inside. A hybrid species, including small handsome varieties. Drain well.
* 12 to 15 in. B\&B.......- $25.00 \quad 225.00$ 15 to 18 in. B\&B.. $3.50 \quad 30.00 \quad 275.00$
- -lennei - May lst, red outside. Striking.
3 to 4 ft . B\&B........ 11.00
- nigra-May 15, dark purple cups. 3 to 4 ft . B\&B.-.-.-. 11.00
-stellata (Star Magnolia)-12 ft. Zone V. Early April sees ribbony, white, fragrant blooms.
$\begin{array}{ll}18 \text { to } 24 \mathrm{in} . & B \& B-. .-5.50 \quad 45.00\end{array}$
3 to 4 ft . B\&B........ $12.00 \quad 110.00$
——Waterlily - New, hardier pinktipped form. Each branch tip has double blooms in late April. Bushy growth. Utterly beautiful. 24 to 30 in . B\&B.. 8.5075 .00
3 to 4 ft . $\mathrm{B} \& \mathrm{~B} . \ldots . . . . . \quad 10.00 \quad 90.00$
4 to 5 ft . B\&B $-\ldots-\quad 12.50 \quad 120.00$


## MALUS

Malus atrosanguinea (Carmine Crab) -15 ft . Zone V. Red.
5 to 6 ft ................. 3.2530 .00
-baccata-40 ft. Zone II. Profuse.

——Mandshurica-15 ft. Zone I. Fragrant, large white. Red Crabs. 5 to 6 ft .-............. 20.00
-eleyi-20 ft. Zone IV. Profuse red flowers, red leaves. 5 to $6 \mathrm{ft} . . .-\quad-\quad-\quad . \quad-\quad . \quad 2.50 \quad 20.00$
-floribunda - 20 ft . Zone V. Pink, opening white. Very profuse. 5 to 6 ft . $\qquad$ $3.25 \quad 30.00$
-hopa-15 ft. Zone IV. Pink bloom, red crabs, remarkable tree.

-ioensis plena (Bechtel)- 15 ft . Zone III. June. Fragrant pink.
4 to 5 ft .
$2.00 \quad 17.50$
6 to 8 ft .
$3.50 \quad 30.00$

Malus micromalus (Midget Crab-9 ft. Zone IV. Neat, upright.. Pink. 6 to $8 \mathrm{ft} .-\ldots-\quad-\quad . \quad . \quad . . . .3 .50 \quad 30.00$
-niedzwetzkyana (Redvein) - 15 ft . Zone III. Reddish flower, leaf.

6 to 8 ft . $\qquad$ $3.50 \quad 30.00$
-prunifolia rinki - 18 ft . Zone IV. Storm of snow, red-yellow crabs hang late.
4 to 5 ft $\qquad$ $2.00 \quad 17.50$
6 to 8 ft .....$3.50 \quad 30.00$
-robusta-20 ft. Zone III. Early, white, fragrant. Red fruit, showy. 5 to 6 ft ................ 20.50200
-sargenti-6 ft. Dwarf. Zone V. Late white. Red berries hang late.
2 to $3 \mathrm{ft} . . . . . . . . . . . . . . . . . ~ 1.259 .50$
5 to 6 ft . $\qquad$ $3.00 \quad 25.00$
-theifera (Tea Crab) - Vase-shaped growth. 12 ft . Zone V. Pink to white s!1ow. 4 to 5 ft .-.-_-_-_-..... $3.00 \quad 25.00$
-Weeping Crab-15 ft. Drooping branches carry carmine flowers followed by large, tart, red apples. 6 to 8 ft ................. 3.5030 .00

## MORUS

Morus alba (Russian Mulberry)- 30 ft . Zone IV. Round-topped tree. Fruit, white to purple, edible.
4 to 5 ft .
$8.00 \quad 60.00$

## NYSSA

Nyssa sylvatica (Tupelo)-60 ft. Zone IV. Interlaced, drooping. Early autumn color. Moist. Hard to transplant.
6 to 8 ft . $\qquad$ 10.00

## OXYDENDRON

Oxydendron arboreum (Sorrel Tree)30 ft . Zone V. Peach-leaves turn red in autumn. Long clusters of white in July and August. Acid.

* 18 to 24 in.
8.00

4 to 5 ft .
$3.00 \quad 27.50$

## PLATANUS

Platanus occidentalis (Sycamore)-120 ft . Zone IV. Giant, dignified native shade tree. Tolerant, but prefers moisture.
*2 to 3 ft . $\qquad$ $\begin{array}{lr}\therefore & 3.00 \quad 15.00\end{array}$ 6 to $8 \mathrm{ft} .-\ldots \quad-\quad-\quad . \quad 2.75 \quad 25.00 \quad 200.00$
-"Orientalis" (Acerifolia) (Plane)90 ft . Zone (V), VI. Good city tree. 6 to $8 \mathrm{ft} . . . . . . . . . . . . . . . . \quad 22.50 \quad 160.00$ 8 to $10 \mathrm{ft} . . . . . . . . . . . \quad \begin{aligned} & 4.25 \\ & 37.50 \quad 325.00\end{aligned}$

## POPULUS

Populus bolleana (Bolleana Poplar)40 ft . Zone III. Narrow column, hardy and disease-free. Better than Lombardy. Green leaf, white beneath.
4 to 5 ft ....................... $15.00 \quad 125.00$

-nigra Italica (Lombardy Poplar) 60 ft . Zone I. Quick column. Popular, but prone to disease, so that old specimens are rare. Very tolerant.
*3 to 4 ft ...................... $3.50 \quad 15.00$ 6 to 8 ft ............... $1.75 \quad 12.00 \quad 100.00$
-tremuloides (Quaking Aspen) - 90 ft . Zone I. Perpetually moving leaves. Stately. Gray bark almost like a birch. Pussy buds, April.

* 4 to 6 ft .
25.00

6 to 8 ft .
$6.50 \quad 50.00$

Photo: Magnolia soulangeana in its annual April riot.



Prunus Amanagawa


Quercus Rubra-Red Oak


Salix Babylonica

## PRUNUS-The Flowering Cherry

These are among the showiest of spring-flowered trees and ideally suited to our American climate so that they thrive entirely without care in ordinary soil. Easy to transplant in sizes offered and bloom in a year or two-no long waiting.

Prunus serrulata (Japanese Cherry)60 ft . Zone V. Smooth brown bark. White or pink in May. Very tolerant. *2 yr. 4 to 8 in. S.. .....- $3.00 \quad 20.00$ 10 to 12 ft . X........ $7.50 \quad 65.00$
--lannesiana (Oriental Cherry) Form with fragrant flowers. Dwarfer. 3 to $4 \mathrm{ft} . \quad 1 . \quad 1.25 \quad 9.00 \quad 65.00$
——Amanagawa-20 ft. Zone V. Erect narrow column, blush-pink in late May.

——Fugenzo (Veitch)-20 ft. Large double pink, late. Spreading. 5 to 6 ft .
$4.00 \quad 35.00$
 to 20 ft . Zone V. May. Pink-white, showy clusters.
5 to 6 ft .
$4.00 \quad 35.00$
-subhirtala (Higan Cherry) - Much branched to 30 ft . Zone V. Early May, light pink.
6 to 8 ft .
$3.50 \quad 27.50$
——pendula (Weeping Cherry)-Familiar fountain of pink. 15 ft . 5 ft ., 2 -year heads $\$ 7.00$ each
-yedoensis (Yoshino Cherry)—50 ft. Zone V. Vigorous species, this kind banks the Tidal Basin at Washington. Pink, fragrant, in May.
4 to $5 \mathrm{ft} . \ldots . . . . . . . . . .2 .5020 .00$
6 to 8 ft .
$5.50 \quad 45.00$

## PRUNUS

Orchard varieties are on pages 61-64. Shrubs page 40.

Prunus americana (Native Plum)-40 ft . Zone V. White flowers. Bird food. 4 to $5 \mathrm{ft} \quad 1 . \quad 1.25 \quad 10.00 \quad 60.00$
-padus (Bird Cherry) - 50 ft . Zone III. Long white clusters in May. Black fruit for birds.
5 to $5 \mathrm{ft} . . . . . . . . .2 .50 \quad 20.00$
—pissardii (Purple-leaf)—15 ft. form with pink flowers in May. Strong pink-purple foliage, dulls in summer. A fine small lawn tree. 5 to 6 ft .
$2.00 \quad 17.50 \quad 150.00$
-pennsylvanica (Wild Red Cherry)-
30 ft . Zone II. White, May; red fruit July. Excellent bird attraction.
*18 to 24 in .................... $\quad 9.00$
5 to 6 ft .............. $1.75 \quad 12.50 \quad 95.00$
-persica rubraplena (Double Red Flowering Peach)-Zone V. 15 ft . Most startling red show in May.
2 to 3 ft .
$9.00 \quad 65.00$

## QUERCUS

Quercus alba (White Oak) - 90 ft . Zone IV. Noble, spreading tree.
5 to 6 ft ..
$27.00 \quad 240.00$

6 to 8 ft .
$4.00 \quad 35.00 \quad 300.00$
-coccinea (Scarlet Oak)-75 ft. Zone IV. Round, open head. Dense, handsome.
*3 to 4 ft .
$10.00 \quad 85.00$
6 to 8 ft .............. $5.00 \quad 40.00 \quad 300.00$
-palustris (Pin Oak)-90 ft. Zone V. Good in damp or dry soil. A fine street tree. Fast-growing.

* 2 to 3 ft .
17.50

6 to 8 ft .
$\begin{array}{lll}4.50 & 35.00 \quad 250.00\end{array}$
-robur (English Oak)-80 ft. Zone V. Short stem. Spreads.
8 to 10 ft .............. $4.00 \quad 35.00 \quad 295.00$

- -fastigiata-Narrow, upright form.

4 to $5 \mathrm{ft} . . . \mathrm{col} \quad 7.00 \quad 65.00$
-rubra (Common Red Oak) - 60 ft . Zone IV. Rapid growth. Heavy branches. Likes clay. Handsome.
*2 to 3 ft .
23.00

6 to 8 ft ..
$4.50 \quad 35.00 \quad 295.00$

## ROBINIA

Robinia pseudacacia (Black Locust)70 ft . Zone IV. Dry, sandy soil. The drought tree! Showy, fragrant white flowers in June.
 Golden Willow)-40 ft. Zone I. Branches are bright startling yellow. Damp soil.
*3 to 4 ft
15.00

6 to 8 ft . $\qquad$ 2.75 20.00 150.00
-babylonica (Babylon Weeping)-30 ft . Zone V. Familiar green fountain. Near, but not in water. Not very good in old age, but fine for, say, 25 years.

* 4 to 5 ft $\qquad$ $275-0$.
45.00

6 to 8 ft . $\qquad$ 2.75
$25.00 \quad 200.00$

-blanda (Wisconsin Weeping)-More vigorous hybrid of Babylonica. Spreading head, weeping. Zone IV 4 to 5 ft . $\qquad$ | 2.75 | 10.00 | 75.00 |
| ---: | ---: | ---: |

-caprea (European Pussy Willow) 78 ft . Zone V. Nice catkins. Best for cutting.
2 to 3 ft . $\ldots \ldots \ldots . . \quad 1.00 \quad 7.50 \quad 65.00$
-nana purpurea (Arctic Willow) Blue leaved dwarf to Zone I. Grows anywhere, even damp clay. Not over 2 ft ., bushv, nice foliage. Excellent for low edging in climates or soils where other dwart hedge plants will not grow.
18 to 24 in $\qquad$ $6.00 \quad 40.00$
-niobe (Golden Weeping) - 40 ft . Zone II. Drooping yellow branches. 6 to 8 ft . $\qquad$ $2.75 \quad 25.00 \quad 200.00$
-pentandra (Laurel-leaf Willow) 60 ft . Zone IV. Handsome tree, shiny dark leaves. Showy catkins April. 6 to 8 ft . $\qquad$ $\begin{array}{lll}2.75 & 23.00 & 190.00\end{array}$

## SOPHORA

Sophora japonica (Scholar Tree)-60 ft . Zone V. Yellow, pea-like blooms in August. Picturesque branching. 4 to 5 ft . $\qquad$ $2.50 \quad 20.00$

## SORBUS

Sorbus americana (American Mt. Ash) - 20 ft . Zone II. Smaller. Redder berries than the European. Acid soil.
5 to 6 ft .-............... $3.50 \quad 32.00$
-aucuparia (European Rowan Tree) -30 ft . Zone III. Clusters of orange berries from July to September. Handsome small tree, grows anywhere. Very showy in fruit. 6 to 8 ft . $\qquad$ $3.50 \quad 25.00 \quad 175.00$

## STEW ARTIA

Stewartia monadelpha (Âsiatic Stew-artia)-75 ft. tree. Zone VI. Humus, moist. Vigorous growing, $11 / 2 \mathrm{in}$. white bloom, July. Handsome.

| 3 to |  | 7.50 | 50.00 |
| :---: | :---: | :---: | :---: |
| to 5 ft . | 1.00 | 9.00 | 75.00 |
| to 6 | 1.50 | 12.50 | 100 |

-pseudocamellia (False Camellia) 50 ft . Tree. Zone V. Handsome tree with huge white bloom in August. Rich soil. Slow. Plant largest size, for it does not bloom young. 6 to 7 ft . $\qquad$ $5.00 \quad 45.00$

## STYRAX

Styrax japonica (Japanese Snow-bell) -20 ft. Zone V. Small tree. Loose soil. Studded with white bells in June-July.
8 to 10 ft .
$5.00 \quad 40.00$

## TAXODIUM

Taxodium distichum (Bald Cypress)80 ft . Zone V. Is not evergreen, but looks like one. Graceful, feathery pyramid. Very fine shade tree. Tolsrant.
4 to $5 \mathrm{ft} . \mathrm{B} \& \mathrm{~B} . . . . . . . .10 .00 \quad 90.00$


Tilia americana (Basswood) - 80 ft . Zone IV. Rich soil, not good in city air. Fragrant white, June.
*3 to 4 ft ...................... $9.50 \quad 75.00$
6 to $8 \mathrm{ft} . . . . . \quad . \quad . \quad . \quad . \quad . \quad 2.75 \quad 23.00 \quad 180.00$
-cordata (Littleleaf Linden) - 90 ft . Zone IV. Dense-headed street tree. Tolerant. Blooms in July.
 6 to $8 \mathrm{ft} . . . . . . . . . . . . . . . . . .3 .50 \quad 30.00 \quad 275.00$
-platyphyllos (Bigleaf Linden) - 100 ft. Zone III. Early flowers. Fine tree. 6 to 8 ft . $\qquad$ $30.00 \quad 275.00$ 12 to 14 ft . $\qquad$ 12.50
--Columnare-Form that grows narrow and tall. Otherwise same.
5 to 6 ft . $\qquad$ 8.00
-vulgaris (Common European Lind-en)-80 ft. Zone IV. Street tree, the best flowers of any. June and July. 6 to 8 ft . $\qquad$ $4.00 \quad 35.00$

## ULMUS

Ulmus americana (American Elm) 100 ft . Zone II. Most beautiful native tree. Tolerant, even of flooded land. Subject to blight near New York.

-pumila (Siberian or Chinese Elm)45 ft . Zone III. Neat, small, bushy tree. Very tolerant of dry land. Perhaps the fastest growth of any permanently desirable tree. Makes an excellent sheared hedge.
*18 to 24 in........................ 6.00

* 4 to 5 ft ....-.............. ........ 15.00 8 to 10 ft .............. $4.00 \quad 25.00 \quad 175.00$

(left) Stewartia flowers.


Ulmus Americana
(right) Ulmus pumila.


All shapely specimens except ${ }^{*}=$ young, unformed plants (See page 13).

## part VII

Dwarf Wealthy Apple
( $1 / 4$ Life Size)

## Hardy



## Fruits

 saving include: Crab-apples, Bush-cherry, Blueberry, Blackberry, nut trees and (in regular fruit) the dwarfed forms rather than the standard trees. An orchard so planned can product a full crop and yet be less than half as much work and expense as an unplanned orchard. Fruit trees are planted like any other deciduous tree (see page 53) or, if shrubs see page 37.
## Drainage

Air among the roots is more essential than food, as it enables a tree to use the food. Hence, drainage must always be good in an orchard. Sandy soil, a gravel subsoil or plentiful stones on a slope make natural drainage. It can be created by tile or stone drains.

## Watering

The supply of water determines growth and fruitfulness-particularly in summer. Nearby springs are the usual natural supply for the soil. Artificial watering is all right for a very few trees, but commercially a meager water-supply is eked out by cultivation of the surface, or by a cover crop turned under in August or late July.

On these seven pages are most hardy forms of permanent food-producing plants. For the most part they need some care, but those most labor-

[^10]


## Fertilizing

Commercial fertilizer being scarce, manure is the usual substitute. Apply in early spring only and omit entirely on trees making a lusty, rich-colored growth of leaves. We offer natural fertilizer for sale. (See page 4.)

## Pruning

Cut cautiously: much damage is done by over-cutting. The more leaves left on a tree, the likelier it is to bloom (and bear) next year. Let no parallel branches lie closer than a foot apart, remove chafing branches, and you have little more to do. Cut clean with sharp tools; all cuts sloping to shed rain; paint at once, don't let rain fall on unpainted cuts.


## Dwarf Fruit Trees

(Available: All kinds listed below)

When ordinary varicties of fruit are grafted on special dwarfing stocks, the result is a tree whose fruit is as large or larger than ordinary, but which never grows very large-perhaps ultimately 12 to 15 feet, but not over 10 feet in the first decade or so.
The advantages are three-fold: First, a dwarf can be sprayed, pruned and picked by hand without ladders, equipment or professional skill. Second, the tree bears much earlier in life, in its third or fourth year at latestoften earlier-and carries unbelievable loads of fruit. Third, dwarfed fruits (especially Plums and Peach) are less liable to borers and other pests.
Root Stocks: All apples on very dwarf Malling 1X (never over 6-7 ft.) Also on other Malling stocks-I, II, III or VI depending on variety-ultimate height 12 to 15 feet. Pears are on Quince; Plums on St. Julien; other fruits on Almond.

## LIST of DWARF VARIETIES AVAILABLE

( $\star=$ Kinds also available in Espaliers, below)

| APPPLES | PEARS | PEACHES |
| :---: | :---: | :---: |
| (state whether dwarf | * Bartlett | $\star$ Elberta |
| or very dwarf wanted) Jonathan | Comice Royal Riviera) | $\star$ Hiley |
| $\star$ Red Delicious | (most delicious known) | $\star$ Rochester |
| $\star$ Red McIntosh | $\star$ Duch. d'Angouleme | $\star$ Crawford |
| $\star$ Cortlandt | $\star$ Flemish Beauty | * Belle of Georgia |
| $\star$ R. I. Greening | * Clapp's Favorite | * Golden Jubilee |
| $\star$ Wealthy | $\star$ Beurre Bosc | $\star$ Valiant |
| $\star$ Yellow Transparent | $\star$ Seckel | $\star$ Eclipse |
| ${ }_{*}$ Redwin Spy | * Sheldon | $\star$ J. H. Hale |
| * Fameuse | * Kieffer | * Red Bird |
| Red Astrakhan Stayman Winsap | Wm. Nevis |  |
| * Duchess Oldenburg | Easter | NECTARINE |
| Gravenstein | Gorham | NECTARINE |
| Yellow Delicious | Duchess Merode | * Red Roman |
| Northern Spy | PLUMS | Hunter |
| Rome Beauty |  | * Boston |
| Spitzenberg | Damson | Newton |
|  | * Reine Claude | * Napier |
| APRICOT | * Burbank | * Sure Crop |
| * Moorpark | $\star$ Åbundance | * Sure Crop |
| Riland | * German Prune | QUINCE |
| $\star$ Early Golden | * Italian Prune | QUINCE |
| $\star$ Perfection | Red June | Orange |
| Alexander | $\star$ Stanley Prune | Champion |

## Dwarf Espalier Fruits

## (Available: All kinds marked $\star$ above)

For centuries they have been well known in Europe. In full sunlight, each individual fruit gets its share. Even if such trees were not ornamental, they would be noteworthy for fruit alone. But they are beautiful-clean-cut form and healthy young side growth-something new and different. Use them instead of vines against the house; train them along wire fences to add beauty and interest.(each)
1 year (about 3 feet)-Not branched ..... $\$ 2.60$
2 year (slightly taller)-Branched ..... 3.90
3 year (4 to 5 feet)-Heavier ..... 5.25
(All varieties)
5 year-bearing specimen9.50(Apples, pears and plums only)(Add 50 c packing allowance on ordersunder \$10.00).


Dwarf Apple loaded to the ground. Amazing on a small tree.


U-Form Fan-shaped Horizontal Cordon

5 to 6 ft high Apple, pear, plum $15^{\prime \prime}$ wide Nectarine, apricot, peach, $30^{\prime \prime}$ wide. $\$ 8.50$ each

Two tiers of stems, 5 to 6 ft . wide.

All varieties listed Apples and Pears
above with $\star$
All varieties listed Apples and Pears
above with $\star$ above with $\star$ $\$ 10.50$ each


## STANDARD FRUIT TREES

Here is a selection of the largest, most vigorous individuals in the commercial planting age-usually 2 year. Only 5 assorted at prices below. A handling charge of $\$ 1.00$ must be added to each order for 4 or less. By so offering our fruits we can make lower prices to you. Our prices are as low as can possibly be made and still maintain scrupulous care in identity, selection, digging and packing.

| (Including packing) | Standard Top-Size (not less than 5 see above) |  |
| :---: | :---: | :---: |
| (Zone IV)- | APPLES | \$1.50 |
| (Zone V)- | QUINCES | 1.90 |
| (Zone IV)- | SOUR CHERRIES .-...... 2 -year $4 \mathrm{ft}. \frac{11}{60} \mathrm{in}$. | 2.30 |
| (Zone V)- | SWEET CHERRIES --- | 2.20 |
| (Zone V)- | PEACHES .-n-year $\frac{1}{15} \mathrm{in}$. | 1.40 |
| (Zone V)- | PEARS .- | 1.90 |
| (Zone IV)- | PLUMS (no 2 -year) 1 -year 4 ft . | 1.70 |
| (Zone III)- | CRABS | 1.50 |

## APPLES (Malus pumila)

Apples prefer well-drained and fertile soil. Main leaders of the trees should be cut back after their first season's growth. Plant 25 feet apart. Most kinds bear at 6th to 8th year.

## EARLY SUMMER

Yellow Transparent. Golden yellow. Medium sized. Flesh tender, juicy and sub-acid. Very hardy. Young biennial bearer. Uses: Cooking. Also for eating when fully ripe.
Lodi. A hybrid of Yellow Transparent. Ripe 10 days later. Larger, better quality. Young annual bearer. Eating, cooking.

## SUMMER APPLES

Red Astrachan. (P) Large striped crimson. One of the best for a single lawn or ornamental tree. Young biennial bearer (sometimes annual). Use: Eating and cooking.
Early McIntosh. (P-best for Northern Spy.) New cross between McIntosh and Yellow Transparent. Has McIntosh color, shape, size and flesh characteristics. Biennial bearer. Uses: Eating, cooking and baking.

## AUTUMN APPLES

Gravenstein. Large striped red. Very good quality. Uses: Eating and cooking.
Fall Pippin. Striped red. Medium sized. Usually annual bearer. Uses: Eating and cooking.

- King. Red with contrasting color. Large sized. Crisp, juicy flesh: One of the best Fall apples. Light annual bearer. Uses: Eating and cooking.
- McIntosh. (P) Striped red. Crisp, delicate, aromatic flesh. Tree longlived, strong grower, and extremely hardy. Young annual bearer. Uses: Eating, cooking, and baking.
- Red McIntosh. (P) Solid Red. Otherwise same as above.
Wealthy (P) Striped brilliantly red. Medium to large. Wonderful flavor and juicy flesh. Noted for hardiness and freedom from disease. Young annual bearer. Uses: Eating, cooking, and baking.


## CRAB APPLES

You need them for preserving, jellies, and ornament. Bear young. 20 feet apart.
Hyslop. Large, brilliantly colored with purplish red. Flesh yelow, peasant. Usually a biennial bearer. October. Dolgo. So handsome it is sometimes classed with flowering crabs. Makes ruby red juice. Sept. I.



Plant 16 to 20 feet apart for permanent orchard. Trifloras and European varieties do not cross-pollinate. Plant at least 2 varieties of either. Triflora varieties bear 3 to 5 years old and other varieties when 5 to 6 years old.

## TRIFLORAS (P. Salacina)

- Abundance. Clingstone. Fruit red and medium sized. Flesh yellow and very juicy. Tree vigorous, upright and productive. Earliest high quality plum to ripen. Early August.
- Burbank. Clingstone. Fruit red and medium sized. Flesh yellow, stringy, very juicy and sweet. Tree low and spreading, vigorous and productive. Late August.


## DAMSONS (P. Insititia)

Shropshire Damson. Small purple fruit in clusters, the best for jams. Very productive. Mid-September.

## CHERRIES

(Prunus)
Sweet and sour kinds are entirely different species. Bush-cherries, next page.

## SOUR (P. avium)

Not actually sour to the taste, but rather tart. Most varieties bear when 3 or 4 years old. Plant 16 to 18 feet apart for permanent orchard. Hardier.

Early Richmond. Clear bright red. Medium sized. Late June. One of the best early cherries.

Montmorency. Largest fruit. Firm flesh. Tree is disease resistant. Delicious for pies, table and preserving. Finest of the "sour" cherries: June.

## SWEET (P. cerasus)

All varieties vigorous and productive Usually bear when 5 to 7 years old Plant 18 to 20 feet apart for permanent orchard. (2-year only.)

- Black Tartarian. (P-best). Medium sized, purplish black fruit. Flesh soft, juicy, richly flavored. Late June.
- Governor Wood. (P) Yellow or light red, medium sized, sweet, juicy. June.
- Yellow Spanish. Large, light yellow with red blush. Firm flesh. Desirable for maraschino. Late June.


## EUROPEAN (P. domestica)

- Bradshaw. Very large, juicy, violetred. Productive. Early September. Good canner.

German Prune. Large dark blue fruit. August-September.

- Lombard. Medium-size, juicy, dark red. A hardy, prolific bearer. MidSeptember.
- Reine Claude (Bavay's Green Gage) -Large, yellow. Old variety, still good. Late September.

Stanley. Large dark blue prune. Annual bearer. Late September.

PEACH (prunus persical)
Most kinds bear very young. 3 to 4 years old. Space 16 to 18 feet apart.

## All are Freestone.

Belle of Georgia. White. Richly flavored. Tree vigorous and productive September 1. Extra hardy

Carman. Large white. Skin tough but flesh tender. Fine flavor and quite juicy. August. Extra hardy.

Champion. White. Flesh firm and sweet. Juicy and thin skinned. Tree and buds hardy. Good bearer. Uses: Eating, cooking, and canning. Sept. 1.

Early Crawford. Medium sized yellow freestone. Flesh juicy and highly flavored. Tree vigorous and productive. August.

Elberta. Yellow. Fruit large, firm, and excellent for canning. Sept. 15.

Golden Jubilee. Yellow. August, extra hardy. Juicy, sweet, yellow flesh.

- J. H. Hale. Can be pollinated by any other variety. Yellow freestone Fruit large and firm. Not as hardy nor as vigorous as some. Early September. Very delicious.

Late Crawford. Yellow. Late Sept.

- Mikado. Popular very early. Aug. 1. Good quality yellow.

Rochester. Delicious. large yellow. Prolific bearer. Late August.

Valiant. Yellow, extra hardy. Late August. Large, good fruit


## PEARS

Bear at 6 to 7 years. Space 18-20 ft. apart. Clapp Favorite should be planted for pollenizing in every orchard.


#### Abstract

- Bartlett. Large, rich, juicy. Golden yellow with red blush. Young bearer August and September. Use: Canning, eating. - Beurre Bosc. Very large, rich juicy Late Sept.-Nov. Hangs well on tree (few windfalls). Eating. (2-yr. only.) - Duchess d'Angouleme. Extra large fruit. Greenish yellow, spotted with russet. Flesh of excellent quality Long-lived tree. Young bearer of large crops. October-November. Probably best for home orchards.


- Clapp Favorite. (P). Fruit large. Pale lemon color, flushed red. Fine-grained, juicy flesh. Slightly ahead of Bartlett's ripening date.
- Kieffer. Extra large. Golden yellow with red tint. Fair quality. Young and heavy bearer. Best known winter pear. October and November. Use: Canning and baking.
- Seckel. Small attractive. Blight-resistant. Sept.-Oct. Use: Spiced and pickled. Also eating.
- $=$ Self-unfruitful. $P=$ Pollenizer (See page 60)


Photo: Highbush Cranberry

## Highbush Cranberries

Large fruited, heavy-yielding types of Viburnum trilobum-high in pectin, selected by the U. S. Dept. of Agriculture. Looks and tastes like cranberry jelly. Delicious. Zone I.

Wentworth. Earliest, ready to be used for jelly early in August; clusters large, drooping.
(Each) (10) (100)
18 to 24 inch \$1.00 \$7.50 \$55.00

## New American Mulberry

Ever-bearing, from the middle of June until the middle of September. Large, refreshing berries that do not have the mawkish sweetness of most varieties. Zone IV. $4-5 \mathrm{ft}$. trees, $\$ 3.00$ each; $^{2}$ 10 for $\$ 25.00$.

## Gumi Cherry

Eleagnus Multiflora (longipes). - Red fruits good raw or in jams and jellies. Low shrub to 6 ft ., indifferent to neglect. Zone IV.
2 to 3 ft . $\$ 1.50$ each ( $\$ 12.50$ for 10 ).

## Dwarf Juneberry

Amelanchier berries are known as "Bilberries" or "Service-berries". Dark red fruit in July. This form grows to 8 ft , Hardy Zone II. Any soil.
(Each) (10)
12 to 18 inch (2 yr.) $-\cdots \quad \$ 1.00 \$ 7.00$

## Beach Plum

Prunus maritima grows 6 to 8 ft . high, hardy into Zone IV. It is not generally known that this shrub thrives in gardens better than on sea-shores. Good drainage. Fine, useful plums in early autumn. 4 to 5 feet $\$ 2.50$ each, 3 for $\$ 6.50$.

## Persimmon

Diospyros virginiana makes a 20 foot tree, moist soil, Zone VI. Fruit late fall, like figs. 8 to 10 foot trees, $\$ 7.50$ each.

UNUSUAL FRUITS
Native Americans

NOTE: The 10 rates do not apply to less than 10 of one kind.

## Thorn Apple

Crataegus Mollis
Zone IV
Scarlet pear-shaped, 1-inch fruit, sweet and mealy, in Sept. Favorite Indian and Pioneer food. White blooms, May, 20 ft . tree. 3 to 4 ft . $\$ 3.50$ each.

Adams Elderberry<br>Sambucus Canadensis Var.)<br>The large berries and extra fruit clusters are a decided improvement over the common kinds. Makes delicious pies, jam and wine. Zone IV. 2 ft . $\$ .90$ ea. ( 10 for $\$ 8.00$ ).



Hansen Bush Cherry

## THE HANSEN BUSH CHERRY

(Prunus pumila, Var.)
Five-foot shrub, branches completely covered with dark red cherries the size of plums. Masses of fragrant white blooms in May. Silvery leaves turn gold and flame in autumn. Set plants 6 ft . apart for ample room or 2 ft . apart in hedge. Bears 4th year. Zone III.
(3) (10)
$11 / 2$ to $2 \mathrm{ft} . \quad \$ 3.50 \$ 8.00$

## BERRY BUSHES (Rubus Species)

Any soil. Prune cautiously, as berries gro wonly on last year's wood! Best prune after fruiting.
(Each) (10) (100)
RED RASPBERRIES (R. strigosus) Z. I.
Latham-Old variety,
very dependable....... $\$ .50 \$ 2.30 \$ 15.00$
St. Regis-Crop in spring another in autumn ........................ $50 \quad 2.50 \quad 15.00$
BLACK RASPBERRY (R. occidentalis)
Black Beauty-Most dependable
"blackcap". Zone III. . $45 \quad 2.00 \quad 12.00$
PURPLE RASPBERRY (R. neglectus)
Sodus-Heaviest bearer of all raspberries. Zone II............ $50 \quad 2.25 \quad 13.50$
BLACKBERRIES-(R. species) Z. III. Alfred-Large, upright and dependable.
$.45 \quad 2.00 \quad 12.00$
Eldrado-the stand-
ard variety $\qquad$ $\begin{array}{lll}.45 & 2.00 & 12.00\end{array}$
Crystal White-White Blackberry.
Novelty, good ............. $50 \quad 2.25 \quad 13.50$
DEWBERRY (R. procumbens) Zone II. Lucretia-Larger and sweeter than any, but soft._-_........... $45 \quad 2.00 \quad 12.00$
WINEBERRY (R. phoenicolasius) Z. V. Juicy, red, fragrant. Fruit in large clusters. Absolutely laborless. Bears on both old and new wood-so expect fruit next summer! Unique.
$\begin{array}{lll}.50 & 2.30 & 15.00\end{array}$


Wineberry-Unusual, juicy

## HYBRID BRAMBLES

Thornless Boysenberry.
Huge, 2 in. berry, highest quality of all brambles. Hardiest of new hybrids. Prolific in fruit. There is no better berry known. Zone VI.
(Each) (10) (100)
1 year .......................... $50 \$ 2.30 \$ 15.00$

## Nectarberry.

Hugest and tastiest of all the new hybrids. Heavier yields over a longer period. The best. Zone VI.

1 year
$\begin{array}{lll}.60 \quad 2.75 & 17.00\end{array}$

## Grape Vines (Vitis) ${ }_{\text {Zone ili. }}$

 Not less than 10 of one variety at 10 rate on these pages.Hybrid Americans: Disease free.

## Old Varieties,

(Each) (10) 2-year $\qquad$ $\$ .90 \quad \$ 6.00$
Catawba-Red, good wine-grape.
Concord-Blue. Strong flavor.
Niagara-White, good wine-grape
Worden-Large early blue.

## New Varieties,

2-year $\qquad$ 1.00
7.00

Fredonia-The earliest black grape.
Portland-White and the earliest of all grapes. Healthy, fine quality.

## Nanking Cherry (Bush)

Prunus tomentosa, 9 ft . shrub, hardy to Zone II. Freely borne white bloom, April; Unbelievable show scarlet $1 / 2$ inch fruit July. Excellent for jelly, etc. Tart, juicy.

2 to 3 feet.
3 for $\$ 3.50$
4 to 5 feet. $\$ 2.00$ each

## Hardy Fig (Ficus)

Brown Turkey - A good-sized, good quality fig in every way, yet hardy in Zone VI if protected from drying winter winds (as by wrapping). Semidwarf, bushy. Strong 2 -vear plants (bear in 2 to 3 years) $\$ 1.50$ each, ( 5 for $\$ 6.00$ ).

## Medlar (Mespilus) <br> Zone V.

Old world small fruit, pear-like, good only after freezing weather. Rare. 4 to 5 feet $\$ 3.50$ each

## Garden Roots

## Asparagus

Paradise variety, good yield, succulent.
(10) (25) (100)

2 yr. roots.
$\$ 2.25 \$ 3.00 \$ 8.00$

## Rhubarb

Linneas, standard variety.
2 yr. roots.
$3.50 \quad 6.00 \quad 16.00$

## Horse-radish

Bohemian, best variety.
2 yr. roots..................... $3.50 \quad 6.00 \quad 16.00$

## Hardy Nut-Trees

There are good nuts to be grown in the north. Chestnuts from seed are young, heavy bearers. The grafted Walnuts are hardier and also bear heavily and young. These two together are the most practical nuts for the north.

## PLANTING and CARE

The first two years mulch well with hay or straw Water if drought comes. Keep all side buds from developing in useless low branches (below 7 feet). Do not plant deepr than they were in nursery. Plant like any deciduous trees (see page 53).

## BLACK WALNUT

One of our most beautiful native trees, growing well in any fertile well drained soil. The grafted sorts bear their first nuts commonly in the third to fifth year. Zone IV.
Ohio-Fine quality nut, fairly fast growth, fairly easy to open.
Stabler meat falls out easily in halves or one piece and is of a rich mellow flavor. A fine spreading specimen.

Thomas is a rapid-growing tree. The meat is attractive and tasty, but does not crack as easily as the Stabler.

Plants twice transplanted, 3 to 4 feet.
any 2 for $\$ 10.00$.
(Not sold singly)

## BLIGHT RESISTANT CHESTNUTS

Chinese Chestnut (Castanea mollisima). Nuts similar to the dying American, of fine flavor, and sweet It is inured to the Chestnut blight. Lives and bears in Zone V. Bears very young. Because of cross pollenizing needs, we will not sell less than 3 trees, but make this special offer:

> (3) (10)
$11 / 2$ to 2 -foot (transplants) $\$ 5.00 \$ 15.00$
(No grafted trees are available)

## HAZLENUT

Corylus americana, our native hazlenut, is not the largest nut in the family (The European Filbert is that). But it is free from disease and delightful to eat-a practical shrub nut for our gardens, which the Filbert is not. To 10 feet, Zone IV. Any moist soil.

4 to 5 feet $\$ 1.75$ each, 10 for $\$ 14.00$


Thomas Walnut-bearing branch and nut.

NUT ORCHARD OFFER-1 Stabler, 1 Ohio, 1 Thomas Walnuts, plus 3 Chinese Chestnut, SIX TREES for \$18.50.


## Huge Hybrid Blueberries

## Named varieties of vaccineum corymbosum, cutting propagated

Really beautiful as specimens or in hedges. Suited for use in small quantities in the small garden. A 100 -foot hedge will pay about $\$ 25$ worth of berries a year! (Spaced 18 ins.)

## Why Wait? Plant Some NOW!

And enjoy the berries sooner. Not only will they add beauty to your garden but each bush will pay for itself many times over! Hardy throughout U.S.A. Blueberries do fully as well with fall planting as with spring.

## Varieties and Prices

|  | (Each) | (10) | (25) | (100) |
| :---: | :---: | :---: | :---: | :---: |
| 2 year ( 6 to 12 in .). | \$1.35 | \$11.00 | \$25.00 | \$85.00 |
| 3 year (12 to 18 in.) | 2.00 | 16.00 | 35.00 | 125.00 |

Cabot-Early, broad spreading bush. Home use
Concord-Hardy, upright, midseason. Fine quality, Large
Jersey-Latest and largest berry. Hardiest. Best shipper.
June-Erect bush. Earliest, dark blue berries.
Rancocas-Early, good quality. Good shipper.
Rubel-Late. Tallest, most erect. Good shipper.
Stanley-Finest quality of all. Light blue. Spreading.
Burlington-Newest named kind: Later than all others. Good shipper. Large. Good quality

## Ornamental

Dwarf (about 4 feet high)
Spring: White and pink flowers; Summer: Handsome blue berries; Fall: Briliant leaves.
Needs only an acid soil
Blueberries require an acid soil containing peat or other rotted vegetable matter. They need a moderate supply of soil-moisture, and good drainage so that the roots can get air during the growing season.
Prune for Heavy Yield
You will get fruit if you just leave 'em alone. But more and larger if you cut out all old canes, and keep new shoots coming. Also when in bloom cut away about half each flower cluster. Fertilize in May.

Set the plants in beds 4 feet apart each way. Several varieties should be included in every planting, as an exchange of pollen is necessary to produce good crops of berries. Or order "mixed" if you wish-we will assort for good pollenization. All varieties are almost equally fine.
Eat Blueberries All Year
The berries can be canned as readily as tomatoes and by almost any standard canning method. Excellent pies, but usable served cold from jars, too, like canned peaches.

## Some Idea of Crops

A bush should produce 2 quarts (worth 75 c wholesale) its 6 th year and by the 8th or 9th about $\$ 1.50$ a year in blueberries. Planted 6 ft. apart ( 1200 to the acre) you could safely expect on good land a gross income of $\$ 1200$ a year, selling wholesale. Picking costs are high, but hiring all work done, a net profit of $\$ 600$ an acre is actually being made on these. The bushes produce for several generations, without care or trouble

LOOK AT THESE BERRIES! Photograph is life-size. Light blue color.


## pare VIII <br> Roses

ROSE supplies this spring are so depleted and trained labor so scarce that nothing remotely approaching a normal offering can be made here. But what we do offer we feel fairly confident of actually shipping, which you will doubtless prefer to a complete listing of items that would never get delivered! We list only good varieties.

Shrub roses (Species) are alone in nearly ordinary supply, as listed below.


## Brownell Creeper Roses. ISee next page.I



Hardy, tolerant shrubs, for the most part. Require some sunshine. Provide bird food.

Rosa carolina (see "Humilis).
-hugonis (Father Hugo's Rose). 8 ft . Zone V. Yellow in May.
12 to 18 in............ $1.00 \quad 9.00 \quad 80.00$ 3 to $4 \mathrm{ft} . \ldots \quad . \quad 2.00 \quad 15.00 \quad 135.00$
-humilis (Pasture Rose). Dwarf. Zone IV. Pink, June-July
18 to 24 in $\qquad$ 1.00
7.50
55.00
2 to $3 \mathrm{ft} . \ldots \ldots \quad 1.15 \quad 9.50 \quad 75.00$
-lucida (Virginia Rose). Shrub. Zone II. Pink, June-July.

2 to 3 ft ............ $1.15 \quad 9.50 \quad 65.00$
—nitida (Bristly Rose). Shrub. Zone IV. Pink in May.

2 to 3 ft ............. $1.15 \quad 9.50 \quad 65.00$
—palustris (Swamp Rose). Shrub. Zone IV. Pink, July-Aug.
2 to $3 \mathrm{ft} . \ldots \quad . \quad 1.15 \quad 9.50 \quad 65.00$
-rubiginosa (Sweet Briar). Shrub. Zone IV. Pink, June.

-rugosa (Red Rugosa Rose). 6 ft . Zone II. Red. All summer.
${ }^{*} 4$ to 8 in $\quad 8.00$ 2 to $3 \mathrm{ft} .-\quad-\quad 1.15 \quad 9.00 \quad 75.00$
--alba-(White form of above.) 2 to 3 ft . $\ldots \quad 1.15 \quad 9.00 \quad 75.00$
-setigera (Prairie Rose). Shrub. Zone IV. Pink mid-summer.

2 to 3 ft ................... $1.00 \quad 7.50 \quad 55.00$

[^11]How to Plant Roses


## HYBRID TEAS

Dwarf. Prune heavily each spring. Zone (V). Bloom all summer. Fertilize well. Delicious fragrance.
We will have several thousand available, but in many different varieties, so that there are not enough of any one kind to offer by name. They are all modern, popular sorts, absolutely No. 1 quality budded, including such kinds as Ami Quinard, Caledonia, Etoile de Hollande, Joanna Hill, K. A. Viktoria, Pres. Hoover, Radiance, Talisman, etc. We cannot offer by name, but will accept orders so long as they last by color. Please state desired color from the following 6 shades only:

| White | Salmon |
| :--- | :--- |
| Yellow | Pink |
| Bicolor | Red |

## Hybrid Tea Rose

Prices: \$1.50 each regardless of quantity ordered, or which variety we select to fill your order. Roses furnished will not be labeled by name, but by color only.

## HYBRID CLIMBERS

Lusty, tolerant vines. Zone V. Bloom in June, except some of the newer patented sorts, which continue thru summer.
Blaze-(Pat.) Masses of scarlet, not only in June, but occasionally through the summer. $\$ 1.50$ each.
Climbing American Beauty-Deep rose-pink, double flowers in June. Good perfume, fine flower shape. $\$ 1.50$ each.
Doubloons-(Pat.) This is a hybrid of R. setigiri and is unusually hardy without protection. Golden yellow, many large flowers, spicy fragrance. $\$ 1.50$ each
Paul's Scarlet-Fine, vigorous scarlet. An old favorite, still one of the best. $\$ 1.50$ each.

## POLYANTHAS

Dwarf, semi-climbers or trailers. Need sun. Space 18 inches. Bloom all summer.
BABY RAMBLERS
Gloria Mundi-Small flowers in clusters, low bushy. Brilliant orangescarlet. \$1.50 each.
FLORIBUNDAS (Large flowered)
A. Grille-(Pat.) Large semi-double brilliant scarlet-crimson. Sturdy Freeblooming. \$1.50 each
Betty Prior-(Pat.) Lively red buds opening to large single flowers, soft pink. $\$ 1.50$ each.
Floradora-(Pat.) Very double bright red on good stems. $\$ 2.00$ each.
Pinocchio-(Pat.) Pointed buds, dainty and delightful. Salmon, flushed gold. \$1.50 each.

## How to Prune Roses



## BROWNELL (sub-zero hardy) ROSES

## Right reserved to complete order next Fall; Roses are scarce



V for Victory

## 8 Brownell Hybrid Teas

## $\$ 1.75$ each; any 3 for $\$ 5.00$

Anne Vanderbilt. Exquisite coppery orange, informal, semidouble, brilliant, fragrant.
Break o' Day. Orange to apricot, large, vigorous, free bloomer.
King Boreas. Lemon-yellow, double, free, constant bloomer.
Lily Pons. White with pure yellow center; large flowers. Vigorous, free bloomer.

## 4 Brownell Creepers

Grow like Wichuraiana Rose, for bank-covering or low climbers. $\$ 1.50$ each.
Apricot Glow. Coppery pink, double, in abundant clusters; a brilliant shade of delicate beauty. Carpet of Gold. One of the earliest to brighten the garden with waves of brilliant pure yellow.
Coral Creeper. All the shades of ocean coral complementing other delightful rose tints.
Magic Carpet. Large, double flowers, orientally patterned in mystic color designs.

Tomkins Red. Semi-double, deep velvety red.
Pink Princess. Bud red, flower deep pink. Free from premature defoliation.
Shades of Autumn. An abundant show of red and yellow, bicolored beauty.
V for Victory. Large, double, yellow, fragrant, constantly blooming.

## 4 Brownell Climbers

Vigorous, hardy canes; colors vivid. Note two everblooming, hardy climbers!
Golden Climber (Mrs. A. C. James). Best yellow. Fragrant; ideal for picking. $\$ 1.50$ each.
Climbing Break o' Day. Vigorous, everblooming apricot. $\$ 2.50$ each.

Orange Everglow. Dazzling copper-orange; fragrant; vigorous; everblooming. $\$ 2.50$ each.
Copper Glow. Deep copperyorange; spicy fragrance. $\$ 1.50$ each.

The result of more than a decade of research, these roses are a new race entirely, and add to unusual hardiness a character of improving with age, rather than slowly deteriorating as most hybrid teas do. They are exceptionally easy to grow and bring into bloom.
Hardiness: About Zone IV, but roots will survive still colder climates.
Guarantee: Any plant that fails to bloom in 2 years will be replaced free anywhere in U.S.A.



[^0]:    *MANURE BRICKS dried, pressed, cow man-
    ure. A one-pound brick readily dissolves in ure. A one-pound brick readily dissolves in 4 gal. of water. Fine plant stimulant. 8 bricks
    $\$ 2.00$ (postpaid E. of Miss.) ; 50 bricks, not postpaid, $\$ 11.00$.

[^1]:    Taxus cusp. nana, 9 to 12 inches $B \& B$
    Juniper Pfitzer, 12 to 15 inches $B \& B$
    Pinus mughus, 12 to 15 inches $B \& B$
    Taxus capitata, 18 to 24 inches

[^2]:    * young, unformed shrubs. $\quad X=$ each transplanting. $\quad B \& B=$ shapely, ball of earth.

[^3]:    * $=$ small, uniformed plants. $\times=$ each transplanting.

[^4]:    - = young, unformed shrubs. $\quad X=$ each transplanting. $\quad B \& B=$ shapely, ball of earth

[^5]:    -communis depressa (Canadensis) 6 ft . Zone II. Bushy, dusty green. Stands damp soil. A real bush, native in the East.
    $\begin{array}{rrrr}\text { * } 8 \text { to } 10 \text { in. X...................... } & 30.00 \\ 18 \text { to } 24 \text { in. B\&B.... } & 3.50 & 27.00 & 250.00\end{array}$

[^6]:    $=$ young, untormed shrubs. $\quad X=$ each transplanting. $\quad B \& B=$ shapely, ball of earth.

[^7]:    - = young, unformed shrubs. $\quad \times=$ each transplanting. $\quad \mathrm{B} \& \mathrm{~B}=$ shapely, ball of earth.

[^8]:    * = young, unformed shrubs. $\quad X=$ each transplanting. $\quad B \& B=$ shapely, ball of earth.

[^9]:    All shapely specimens except * $=$ young, unformed plants (See page 13).

[^10]:[^11]:    -wichuriana (Memorial Rose). Zone V. Trailer. White all summer.

    * 6 to 12 in.
    $\begin{array}{lr}9.00 \\ 5.00 & 35.00\end{array}$

