Gene S. Howard 2/

The plant species and varieties listed in this bulletin are generally hardy and adaptable to the climatic conditions of the Central Great Plains. The region is arid to semiarid and may be defined as the area extending westward from the 100th meridian to the Rocky Mountains and lying north of the New Mexico and south of Montana state lines.

These plants are adaptable to all portions of this region. Less hardy species, as well as these, can be successfully grown in protected areas at altitudes of 5,000 feet or less within the region. They may also be grown in the intermountain great-basin region west of the Rocky Mountains which has similar northern and southern boundaries.

The plant list was compiled from thousands of species and cultivars collected and tested at the USDA High Plains Grasslands Research Station3/ in Cheyenne, Wyoming during the years 1930-1974. All types of horticultural plants were in those trials: tree fruits

1/ Contribution from the US Department of Agriculture - Agricultural Research Service and the University of Wyoming Agricultural Experiment Station.
2/ G. S. Howard, Horticulturist (retired), USDA-ARS, 8408 Hildreth Road, Cheyenne, WY 82009.
3/ Formerly, USDA Horticultural Field Station, 8408 Hildreth Road, Cheyenne, WY 82009.
and small fruits, trees and shrubs for ornamental and windbreak planting, herbaceous perennials, annual flowers and vegetables. Varieties of strawberries and raspberries developed at the research station are marked by a plus sign (+).

Woody plants for the home and garden may be obtained as dormant bareroot, balled and burlapped, or container grown plants. Large trees and shrubs can be transplanted with a tree spade. Bareroot woody plants should be planted in April or the first half of May. Others may be planted anytime during the growing season but will generally become better established if planted early.

Trees and shrubs for windbreak planting in urban and rural areas must be planted in clean-cultivated soil generally on the windward side of the buildings. All competing vegetation must be killed by tillage or herbicides and the area kept free of vegetation.

Windbreaks of small trees planted in holes in sod are generally doomed to failure. Even if extensive care and watering are given, growth is slow and losses are high. Plant shrubs 3 to 4 feet apart and trees 8 to 13 feet apart. The rows should be 16 to 20 feet apart. Generally 40 to 100 feet from buildings is the proper distance, since the protection provided is about 10 times the height of the trees.

Winters in the Central High Plains have high winds coupled with low humidity and low temperature. This combination causes drying out (desiccation) and death of less hardy plant material. It is advisable to water all evergreens during the winter to prevent this drying out since they do not lose their leaves like the deciduous trees. Planting care guides for horticultural plants are available at county extension offices and the University of Wyoming Agricultural Extension Service, and also at most nursery stores.

Some of the plant species listed here are not readily available commercially. They may be obtained at special native plant nurseries in the region or propagated locally. Both botanical and common names are given for these plants.

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name or Cultivar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TREES (Evergreen)</strong></td>
<td></td>
</tr>
<tr>
<td>Abies concolor</td>
<td>Concolor Fir</td>
</tr>
<tr>
<td>Abies lasiocarpa</td>
<td>Alpine Fir</td>
</tr>
<tr>
<td>Juniperus monosperma</td>
<td>Oneseed Juniper</td>
</tr>
<tr>
<td>Juniperus scopulorum (many cultivated forms)</td>
<td>Rocky Mountain Juniper</td>
</tr>
<tr>
<td>Juniperus virginiana (many cultivated forms)</td>
<td>Eastern Red Cedar</td>
</tr>
<tr>
<td>Picea Engelmannii</td>
<td>Engelmann Spruce</td>
</tr>
<tr>
<td>Picea glauca 'Bensata'</td>
<td>Black Hills Spruce</td>
</tr>
<tr>
<td>Picea pungens</td>
<td>Colorado Spruce</td>
</tr>
<tr>
<td>Pinus aristata</td>
<td>Bristlecone Pine</td>
</tr>
<tr>
<td>Pinus edulis</td>
<td>Colorado Pinyon Pine</td>
</tr>
<tr>
<td>Pinus flexilis</td>
<td>Limber Pine</td>
</tr>
<tr>
<td>Pinus Mugo</td>
<td>Swiss Mountain Pine</td>
</tr>
<tr>
<td>Pinus ponderosa</td>
<td>Ponderosa Pine</td>
</tr>
<tr>
<td>Pinus nigra</td>
<td>Austrian Pine</td>
</tr>
<tr>
<td><strong>TREES (Broadleaf)</strong></td>
<td></td>
</tr>
<tr>
<td>Acer Ginnala</td>
<td>Amsur Maple</td>
</tr>
<tr>
<td>Aesculus sp.</td>
<td>Horsechestnut, Ohio</td>
</tr>
<tr>
<td>Celtis occidentalis</td>
<td>Buckeye</td>
</tr>
<tr>
<td>Crataegus arbores</td>
<td>Hackberry</td>
</tr>
<tr>
<td>Elaeagnus angustifolia</td>
<td>Russian Hawthoro</td>
</tr>
<tr>
<td>Gleditsia triacanthos</td>
<td>Russian Olive</td>
</tr>
<tr>
<td>Malus sp. (Flowering Crabapple cultivars)</td>
<td>Honeylocust Cultivars: Beatrix, Imperial, Harvard, Hoarfrost, Shadowmaster, Skyline</td>
</tr>
<tr>
<td>Populus sp. (Cottonwoods, Poplars)</td>
<td>Alney, Dolgo, Hops, Radiant, Roebloom, Sundog</td>
</tr>
<tr>
<td>Use male trees</td>
<td></td>
</tr>
</tbody>
</table>
* Quercus rubra
* Quercus macrocarpa
* Sorbus aucuparia
* Sorbus hybridra
* Tilia americana
* Ulmus pumila
  Betula pendula 'Cracilis'

** SHRUBS (Evergreen)**

* Juniperus chinensis 'Pfitzerana'
* Juniperus communis
* Juniperus Sabina
* Juniperus sabina 'Tamariscifolia'
* Juniperus squamata 'Meyeri'
  Fritzer Juniper
  Common Juniper
  Savin Juniper
  Tamarix Juniper
  Meyer Single Seed Juniper

** SHRUBS (Broadleaf)**

* Caragana arborescens
* Caragana frutescens 'Blue Nana'
* Caragana microphylla
* Caragana pygmaea
* Corylopis sp.

* Cornus sarracea

* Cotoneaster acutifolius (Black fruit)
* Cotoneaster integerrimus (Red fruit)
* Cotoneaster lucidus (Black fruit)
* Cotoneaster racemiflorus
  Nokonoske (Red fr.)

* Forestiera neomexicana
* Ligustrum vulgare '_nanum'
* Lorimera Koolkowii Zabelii

* Lonicera sp.

* Perovskia atriplicifolia
* Philadelphus levisii
* Philadelphus sp.
* Potentilla fruticosa 'Friedrichsenii'

* Potentilla parvifolia 'Farreri'
* Prunus triloba x P. pedunculata
* Prunus tenuiloba
* Prunus tomentosa
* Prunus virginiana demissa

* Northern Red Oak
* Bur Oak
* European Mountain Ash
* Oak-leaf Mountain Ash
* American Linden
* Siberian (Chinese) Elm
  Cutleaf Weeping Birch

* Prunus sp.

* Rhamnus cathartica
* Rhamnus darwinia
* Rhamnus saxatilis
* Rhus triolobata
  Rosa foetida 'Bicolor'
  Rosa sp.

* Sambucus canerles
* Sambucus racemosa
* Sibirea laevigata
* Spiraea japonica
* Spiraea nipponica
* Spiraea Sargentiana
* Spiraea trilobata '5. trilobata'
* Spiraea Vanhouttei
* Spiraea Wilsonii
* Syringa josiae
* Syringa Pervanica
* Syringa villosa
* Syringa hybrid (Lilacs)

* Colorado Redosier
* Dogwood
* Peking Cotoneaster
* European Cotoneaster
* Hedge Cotoneaster

* Sangari Redhead

* Cotoneaster New Mexican Forestiera
* Lodoreae Privet
* Zabel Blueleaf

* Honey suckle
  Arnold Red, Cardinal,
  Carlson, Velutina

* Russian Sage Perovskia
  Lewis Macloviana
* Mrs. Thompson & Silvia

* Friedrichsen Bush
* Cinquefoil
* Furrer Cinquefoil
* Prairie Almond
* Russian Almond
* Manchu (Chinese) Cherry
* Western chokecherry,
  Schuberts purple-leaved

* Viburnum burejaeticum
* Viburnum lantana
* Viburnum lentago

** HEDGES (Evergreen)**

* Juniperus scopulorum
* Juniperus virginiana
* Picea pungens
* Pinus edulis

** HEDGES (Broadleaf)**

* Caragana arborescens
* Caragana microphylla
* Cotoneaster acutifolius
* Cotoneaster integerrimus
* Cotoneaster lucidus

Newport, Clethra
purple-leafed
Common Buckthorn
Dahurian Buckthorn
Rock Buckthorn
Shrubby Sumac
Austiran Copper Rose
Hartions Yellow or
Yellow Rose of
Texas
Blueberry Elderberry
Redman Elderberry
Smooth Siberia
Mongolian Spirea
Mipon Spirea
Sargent Spirea
Snowflake Cultivar
Threelobe Spirea
Van Houte Spirea
Wilson Spirea
Hungarian Lilac
Persian Lilac
Lael Lilac
Ellen Willmore, Leon
Gambetta, Lucie
Baltet, Marshal
Foch, Mme., F.
Morel, Monge, Poc-
shantas, Como, J.
Callot, Thunberg,
Pres. Carnot
Manchurian Viburnum
Wayfaring Tree
Nannyberry

** HEDGES (Broadleaf)**

* Siberian Peashrub
* Littleleaf Peashrub
* Pygmy Peashrub
* Heavenly Blue, Arzoe,
  Blue Haze

* Rocky Mountain Juniper
* Eastern Red Cedar
* Colorado Spruce
* Colorado Flaxen Pine
FRUITS Continued

<table>
<thead>
<tr>
<th>Gooseberry</th>
<th>Grape</th>
<th>Native Plums</th>
<th>Plums: Prune Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinxwell</td>
<td>Alpha</td>
<td>Manet</td>
<td>Blue Denson</td>
</tr>
<tr>
<td>Red Jacket</td>
<td>Beta</td>
<td>South Dakota</td>
<td>Mt. Royal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dakota</td>
<td>Bonne St.Anne</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terry</td>
<td>Richland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hildebre+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yakima</td>
</tr>
</tbody>
</table>

Plums: Japane-Hybrids (Need pollinators)

- Emerald
- Fiebing
- La Crescent
- Pembina
- Superior
- Tecumseh

Raspberry Sandcherry Hybrids Strawberry

- August Red
- Pathfinder+
- Opata
- Port Laramie+
- Ogalalla+
- Superfection

VFRENTIAL FLOWERS (Listed in order of bloom date)

- Clematis x jackmanii
- Euphorbia epithymoides
- Papaver orientale
- Veronica spica
- Lilium rubellatum
- Anemone-Droopmore
- Iris, many cultivars
- Pentstemon glut.
- Dictamnus albus & D. albus 'Rubra'
- Nepeta Mussini
- Peony, many cultivars
- Lilium superbus
- Lilium sp., Amber Gold, Bright Star, Crinum Beauty, Fire King, John Evans, Luna, Overture, Queen of Hearts, Thunderbolt, Turcasp
- Gaillardia
- Potentilla recta sulphures & P. anemone
- Daphne species & cultivars
- Sedum species & cultivars
- Achillea Patens
- Arctostaphylos 'Mound Perennial Phlox
- Lilium tigrinum
- Tall Asters
- Chrysanthemum, many cultivars

ANNUAL FLOWERS (All of the more common kinds)

- BULBS
- Daffodil, Dahlias, Gladiolus, Grape Hyacinth, Jonquils, Tulip, Crocus, Allium

LAWN GRASSES: Irrigated

- Kentucky Bluegrass & its cultivars (for full sun)
- Chewing & Illabae Fescue, Creeping Red Fescue (for shady places)

LAWN GRASSES: Dryland

- Fairway Creasted Wheat
- Blue Orama
- Buffalo Grass

VEGETABLE CULTIVARS

Grow only the early to mid-season kinds.
REFERENCES


Harold J. Tuma, Director, Agricultural Experiment Station, University of Wyoming, Box 3354, University Station, Laramie 82071

Persons seeking admission, employment or access to programs of the University of Wyoming shall be considered equally without regard to race, color, national origin, sex, religion, political belief or handicap.

2-82/2M/14