

CO-OPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
State of California

Office
copy

University of California
and United States Department
of Agriculture, cooperating

University of California
College of Agriculture Extension Service

Public Service
121 Giannini Hall
Berkeley 4, California

Revised, April 1955

ORNAMENTAL PLANTS TOLERANT OF SALINE AND ALKALI SOILS

H. M. Butterfield*

The ornamental plants listed herein have been observed over a long period of years to have some tolerance to both saline and alkali soils. Some of them have more tolerance than others. Actual field experience or knowledge of past field experience is the most reliable guide in determining which of these plants will be satisfactory for any specific locality or area. It is important to realize that such other factors as soil texture, soil fertility, soil management, water supply, drainage, and especially climate, also influence the selection of ornamental plants for any locality. If these other factors are favorable, the ornamental plants listed may be expected to grow well in soils which are either moderately saline or moderately alkaline.

TREES

Acacia baileyana
Acacia melanoxylon (blackwood acacia)
Brachychiton populneum (bottle tree)
Carya illinoensis (pecan)
Casuarina stricta (and other species
of beefwood)
Catalpa speciosa
Ceratonia siliqua (carob)
Cercidium floridum (torreyanum)
(Palo Verde)
Cinnamomum camphora (camphor tree)
Eucalyptus rostrata (red gum)
Eucalyptus rudis (desert gum)
Eucalyptus tereticornis (slaty gum)
Ficus macrophylla (rubber tree)
Fraxinus velutina (Arizona ash)
Gleditsia triacanthos (honey locust)
Juglans hindsii and other black walnuts
Koelreuteria paniculata (goldenrain tree)
Melaleuca leucadendron (cajeput tree)
not frost resistant
Melaleuca styphelioides (paperbark or
bottlebrush)
Melia azedarach var. umbraculiformis
(umbrella tree)

Morus nigra (black mulberry)
Myrica californica
Olea europaea (olive)
Parkinsonia aculeata (Jerusalem-thorn)
Paulownia tomentosa
Pistacia chinensis (Chinese pistache)
Platanus racemosa (Western sycamore
and other species or varieties)
Populus fremonti (Fremont's cottonwood)
Prosopis glandulosa (honey mesquite)
Quercus lobata (valley oak)
Quercus robur (English oak)
Robinia pseudo-acacia (black locust)
Robinia pseudo-acacia var. decaisneana
(pink-flowered locust)
Salix discolor (pussy willow)
Salix laevigata (red willow)
Schinus molle (pepper tree)
Tamarix aphylla (athel)
Ulmus pumila (Siberian elm)
Zizyphus jujuba (common jujube)

* Agriculturist

PALMS AND TREE-LIKE PLANTS

Arundo donax (giant reed)
Phoenix canariensis (Canary Island
date palm)
Phoenix dactylifera (date palm of
commerce)

Phormium tenax (New Zealand flax)
Washingtonia filifera (California fan
palm)
Washingtonia robusta (sonorae) (Sonora
fan palm)
Yucca spp.

SHRUBS AND SUBSHRUBS

Abelia grandiflora
Abutilon spp. (flowering maple)
Acacia armata (Kangaroo thorn)
Acacia longifolia (Sydney wattle)
Aloysia triphylla (Lippia citriodora)
(lemon verbena)
Arbutus unedo (strawberry tree)
Atriplex brewerii (salt bush)
Berberis thunbergi
Callistemon lanceolatus (and other
species of bottle brush)
Cephalanthus occidentalis (button-bush)
Choisya ternata (Mexican-orange)
Chrysanthemum frutescens (marguerite)
Colutea cilicica (Cilician bladder senna)
Convolvulus cneorum
Cortaderia selloana (pampas grass)
Cytisus canariensis (Canary Island broom)
Deutzia lemoinei
Dodonaea viscosa
Elaeagnus pungens
Fabiana imbricata
Heliotropium arborescens (heliotrope)
Hibiscus rosa-sinensis (Chinese hibiscus)
Jasminum nudiflorum

Lagerstroemia indica (crape myrtle)
Lavatera assurgentiflora (tree mallow)
Leptospermum laevigatum (Australian tea
tree)
Lonicera tatarica (Tatarian bush honey-
suckle)
Melaleuca ericifolia (Swamp paper bark;
bottle brush)
Melaleuca hypericifolia
Melaleuca nesophila
Myoporum laetum
Myrtus communis (myrtle shrub)
Nerium oleander (oleander)
Pelargonium hortorum (garden geranium)
Philadelphus virginialis (mock-orange)
Pittosporum tobira (and other species)
Prunus ilicifolia (holly-leaved cherry)
Punica granatum (pomegranate)
Pyracantha coccinea (firethorn)
Ribes sanguineum (wild currant)
Spartium junceum (Spanish broom)
Syringa persica (Persian lilac)
Tamarix spp.
Teucrium spp. (germander)
Thryallis glauca

VINES

Antigonon leptopus (coral-vine
Rosa de Montana)
Aristolochia durior (Dutchman's pipe
vine)
Bougainvillea spp.
Dolichos ligatus (Australian pea vine)
Doxantha unguis-cati (trumpet vine)
Hedera helix (English ivy)
Jasminum mesnyi (primrose jasmine)
Lantana selloana (trailing lantana)
Lonicera japonica var. halliana
(Hall's honeysuckle)

Wistaria sinensis (Chinese wisteria)

Parthenocissus quinquefolia
(Virginia creeper)
Parthenocissus tricuspidata var.
veitchii (Boston ivy)
Passiflora caerulea, P. edulis, P. jame-
soni, P. manicata, P. mollissima (and
other species of passion-flower)
Phaedranthus buccinatorius
Rosa (climbing varieties of roses on
Ragged Robin root)
Vitis vinifera (long-pruned varieties of
grapes)

BULBS AND ROOTS

<i>Calochortus</i> spp. (Mariposa-lily)	<i>Iris germanica</i> (German iris)
<i>Canna indica</i> . (as var. King Humbert)	<i>Scilla hispanica</i> (<i>S. campanulata</i>)
<i>Crocus vernus</i> (common crocus)	(Spanish squill)
<i>Hemerocallis fulva</i> (tawny day-lily)	<i>Scilla sibirica</i> (Siberian squill)

ANNUALS AND PERENNIALS

<i>Aethionema saxatile</i> (stone-cress)	<i>Helleborus niger</i> (Christmas rose)
<i>Althaea rosea</i> (hollyhock)	<i>Hibiscus moscheutos</i> (common rose-mallow)
<i>Amaranthus caudatus</i> (tassel flower)	<i>Iberis amara</i> (candytuft)
<i>Anemone japonica</i> (Japanese anemone)	<i>Lavandula</i> spp. (lavender)
<i>Anthemis tinctoria</i> (golden marguerite)	<i>Majorana hortensis</i> (marjoram)
<i>Antirrhinum majus</i> (common snapdragon)	<i>Melissa officinalis</i> (lemon balm)
<i>Asperula odorata</i> (sweet woodruff)	<i>Mesembryanthemum</i> spp. (and related ice plants)
<i>Aster novi-belgi</i> (New York aster)	<i>Myosotis scorpioides</i>
<i>Calendula officinalis</i> (pot marigold)	<i>Nicotiana glauca</i> var. <i>glauca</i>
<i>Centaurea cyanus</i> (cornflower)	(flowering tobacco)
<i>Cheiranthus cheiri</i> (wallflower)	<i>Oenothera biennis</i> (common evening primrose)
<i>Chrysanthemum maximum</i> (Shasta daisy)	<i>Papaver</i> spp. (poppy)
<i>Coreopsis grandiflora</i> (and other species of <i>Coreopsis</i>)	<i>Petunia</i> spp.
<i>Corydalis sempervirens</i>	<i>Phlox divaricata</i> (blue phlox)
<i>Cosmos bipinnatus</i> (common cosmos)	<i>Phlox paniculata</i> (garden phlox)
<i>Dianthus</i> spp. (pinks and carnations)	<i>Phlox subulata</i> (moss phlox)
<i>Dimorphotheca</i> spp. (cape-marigold)	<i>Salvia</i> spp. (sage)
<i>Gaillardia aristata</i>	<i>Saxifraga aizoon</i> (aizoon saxifrage)
<i>Gazania</i> spp.	<i>Sempervivum tectorum</i> (roof house-leek)
<i>Gerbera jamesoni</i> (gerbera, Transvaal daisy)	<i>Silene stellata</i> (starry campion)
<i>Gilia capitata</i> (globe gilia)	<i>Verbena hortensis</i> (common verbena)
<i>Gypsophila repens</i> (creeping gypsophila)	<i>Viola lutea</i> (European yellow violet)
<i>Helianthus giganteus</i> (giant sunflower)	<i>Zinnia</i> spp.
<i>Heliopsis helianthoides</i> (sunflower heliopsis)	

LAWN GRASSES

<i>Cynodon dactylon</i> (Bermuda grass)	<i>Poa pratensis</i> (Kentucky bluegrass)
<i>Festuca elatior</i> (meadow fescue)	for a moderate amount of alkali