

REVIEW

Potential Ornamentals From Our Native Plants and Their Use in Landscaping¹

John E. Fucik

Texas A&I University Citrus Center, Weslaco, TX 78596

Abstract

Twenty-three plants native to the Rio Grande Valley (RGV) are described along with the characteristics which would make them particularly useful and attractive in lower Rio Grande Valley gardens. Trees, shrubs, vines and ground covers are represented in the selections.

Ideally, if a region's native plants are to be used in settings other than duplications of natural plantings, they should fit a wide array of landscaping styles and sites while at the same time require minimum care. From the nurseryman's viewpoint they must be easy and inexpensive to propagate and readily marketable.

I have chosen 23 native plants which I think are either underplanted or could be used in a wider variety of settings. All meet the above landscaping criteria and have considerable commercial potential but may require more research and study to insure meeting the nurseryman's and consumer's needs. Besides placing them in the usual landscape groups I've also suggested some common exotic plants for which they might be substituted.

Tall Trees

Cedar elm (*Ulmus crassifolia*, Nutt.)- deciduous, native substitute for American elm. For heavier but well-drained soil; minimum litter (small leaves, fruit and flowers); in many years leaves will turn bright yellow in the fall. Especially well-suited for 2-story, traditional homes where summer shade and winter sun are desired. Substitute for: live oak, golden rain, pecan.

Sugar hackberry, weeping form (*Celtis laevigata*, Willd.)- the regular hackberry, a member of the elm family, is suitable, but the RGV has relatively few weeping trees for landscaping. Such trees which produce fairly dense shade lend an enduring, graceful quality to the landscape. With its aura of Spanish moss (which does well only where high humidity can be maintained) the weeping hackberry would be most appropriate with a southern colonial home. Substitute for: weeping willow and live oak with moss.

Western soapberry (*Sapindus saponaria* var *drummondii*)-this compact, deciduous tree is very well suited for planting around the typical one-story house. Its 25 ft. height and 15 ft. spread make it ideal for use where space is limited. Because the 3/4 inch diameter fruit has an unusually high saponin content, early settlers used them as an ingredient in making soap. Substitute for: poplar, birch, dogwood and aspen.

Rio Grande ash, male (*Fraxinus berlandieriana*, DC.)- the botanical term for the sexual characteristics of our native ash is dioecious, meaning male and female flowers are borne on separate trees. Besides having no fruit (seeds) the crown of the male tree tends to be fuller and have darker green leaves. Of course, the only way to guarantee a male tree is by vegetative propagation. Substitute for: seedling ash, live oak, beech and chestnut.

Medium Trees

Palo verde (*Parkinsonia texana* var. *texana*)- this relative of the more familiar retama has a fuller crown, larger leaves and more flamboyant, pure yellow flowers. As the name (Spanish for green wood) suggests, the branches are an unusual, mossy green color. Other than needing a well-drained, alkaline soil (it's at home in the caliche hills of western Hidalgo and Starr Counties) its cultural requirements are minimum. Substitute for: golden chain, mimosa and dogwood.

Mountain torchwood (*Amyris madrensis* S. Wats)- this member of the citrus family has glossy leaves, and white, fragrant, but inconspicuous flowers. It makes a most attractive choice where a hardy, evergreen is needed. In nature it prefers partial shade and grows quite slowly. Substitute for dogwood, crabapple, redbud and hawthorn.

Guajillo (*Acacia berlandieri* Benth.)- like its cousin the mesquite and huisache, provides only light shade so plants which can use considerable but not full sunlight will do well under it. With sufficient rain it produces an abundance of cream colored, 1/2 inch globe-like flowers in late spring. Like other legumes, guajillo could add nitrogen to the soil. Substitute for: mimosa, locust and smoketree.

Small Trees/Tall Shrubs

Zitherwood (*Citharexylum berlandieri* Robins)- this 12-15 ft. shrub has attractive white flowers followed by bright reddish-orange berries which are relished by wildlife. By training the shrub to 3-4 trunks, it would make a small tree for use where space is limited. Substitute for: duranta, lilac, snowberry.

Baretta (*Helietta parvifolia* (Hemsl.) Benth.)- this citrus relative, native to the western Valley's caliche hills, is threatened by development and habitat destruction. This delicate appearing, bright green-leaved tree is actually very resistant to freezing and drought. For that sunny, well-drained but limited space, the baretta would be an excellent candidate. Like other native Rutaceae, seed and vegetative propagation needs to be investigated. Substitute for: ligustrum, pittosporum and crepe myrtle.

¹Text of talk given at the 45th Annual Institute of the Rio Grande Valley Horticultural Society, Jan. 15, 1991.

Brasil (*Condalia hookeri* M.C. Johnst.)- with its full crown and small, very bright green leaves, brasil could be trained to a small tree or large shrub. Its form suggests it might stand the fairly severe shearing and shaping that would be suited to a formal or contemporary landscape design. Substitute for: yew, boxwood and ironwood.

Blackbrush acacia and Catclaw acacia (*Acacia rigidula* Benth., and *Acacia greggii* Gray). These two very thorny shrubs will challenge any living or non-living competitor for the title "most impenetrable hedge". The acacias' white to creamy yellow flowers are food for bees as well as the eyes and their fruit has considerable wildlife value. Substitute for: barberry, barbed wire and blackberry.

Medium to Small Shrubs

Maytenus (*Maytenus texana* Lundell)- this thick-leaved, diminutive shrub could serve equally well in a low growing border or as a ground cover. Substitute for: carissa, dwarf boxwood and dwarf pittosporum.

Manzanita or Barbados cherry (*Malpighia glabra* L.)- while this glossy-leaved shrub if unpruned may grow to 8 ft., it is readily transformed into a dense groundcover when moved regularly. Crepe-like pink flowers are followed by bright red berries which are relished by birds. Substitute for: viburnum, privet and photinia.

Whitebrush (*Aloysia gratissima* var. *gratissima* (Gill. & Hook.)- this rather open shrub has small green leaves and dainty white flowers which are very attractive to bees. Its shape and blooms make it an attractive specimen in a contemporary setting, courtyard, townhouse or Japanese garden. Substitute for: butterfly bush, spirea and summer sweet (clethra).

Guayacan (*Guaiacum angustifolium* Engelm.)- this narrow-leaved, brushland native bears considerable resemblance to the evergreen yews except for its small purple flowers and purse-shaped fruit. If it would stand shaping and trimming it would be a good substitute for yews, boxwood and juniper as an evergreen hedge or specimen plant in the formal or contemporary garden.

Desert yaupon (*Shaeferia cuneifolia* Gray)- the low growth habit and red berries of this sunloving shrub are reminiscent of dwarf holly or cotoneaster. It could also substitute for carissa, dwarf yaupon holly and privet.

Crucillo (*Randia rhagocarpa* Standl.)- another small-leaved shrub which might be trimmed or trained for a formal setting like boxwood or yew. It could also fit into a contemporary or oriental style design. Substitute, untrimmed, for barberry, snowbush and bridalwreath.

Vines

Railroad vine (*Ipomoea pes-caprae* (L.) R.Br.)- this beachside native appears quite at home in mid-Valley yards. Its showy purple, trumpet-shaped flowers and succulent leaves grow as well along the ground as covering a chainlink fence. Substitute for: morning glory, wisteria, climbing rose and clematis.

Queen's wreath (*Antigonon leptopus* Hook. & Arn.)- a very vigorous climber and rambler with showy pink blossoms and perennial roots. Substitute for jasmine, honeysuckle and trumpet creeper.

Ground Covers

Dayflower (*Commelina erecta* L.)- the native version of wandering jew, individual plants with exceptionally large sky-blue flowers have been propagated. Good for covering large areas in sun or partial shade where minimum care is desired. Substitute for: ivy, vinca and daylily.

Hoary pea (*Tephrosia lindheimeri* Gray)- a low-growing legume with showy purple flowers. Tolerant to drought and cold. Substitute for: ferns, hosta and ajuga.

Chisme (*Portulaca pilosa* L.)- a succulent-leaved plant with small purplish flowers which thrives in sandy, dry areas. Substitute for: moss rose and iceplant which it closely resembles.

All these plants are natives and certainly well-adapted to areas resembling their usual habitats. To insure successful general use, however, more information is needed on their tolerance to all Valley soils and sites, the potential for finding and propagating superior individuals and their response to the varying demands of domestication.