

# Ornamental plant susceptibility to damage by deer in Florida <sup>1</sup>

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Martin B. Main, Joe Schaefer and Ginger M. Allen<sup>2</sup>

## General Comments

Deer have many qualities we admire and value. Deer also may become a nuisance when their feeding behaviors damage ornamental plants and gardens and cause aggravation, inconvenience, and financial costs to property owners. As human dwellings continue to increase in rural areas where deer occur, the incidence of deer-human conflicts also will increase. This is particularly true where human developments replace native habitats and reduce the availability of natural foods preferred by deer. In these instances, deer may quickly become accustomed to feeding upon gardens, ornamental plantings, groves, and nurseries. Damage from deer may be reduced by fencing and the use of chemical repellents (see Main, Schaefer, and Allen, 1999), but a simpler, less expensive, and generally more effective alternative is to landscape with plants that deer do not like to eat.

Deer will feed upon a variety of vegetation including weeds and flowers, grasses, trees, shrubs, vines, and fruits and vegetables. Deer do not eat all plants, however, and diet is influenced by plant qualities such as taste and digestibility, and individual

preferences among animals. Where deer densities are high, even plants that are normally avoided may be eaten. This IFAS extension fact sheet identifies some of the ornamental plants commonly planted in Florida and their susceptibility to damage from deer. This information may be used to guide planting decisions in areas where damage from deer is likely to be a problem. Development of this document was facilitated by a survey regarding susceptibility of commonly planted trees, shrubs, and perennials to browsing damage by deer of 71 Florida county extension agents with horticultural expertise. Thirteen counties responded to the survey, five of which provided plant species lists and eight of which reported that damage from deer was not a problem in their area.

The information provided is organized by plant growth form and is designed to assist in making decisions when landscaping in areas where damage from deer is likely to be a problem. All species listed are known to grow in Florida. In some cases, multiple species and varieties exist for a common name, such as Juniper (*Juniperus* spp.). In these instances, some species may be more susceptible than others and

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  2. Martin B. Main, Assistant Professor and Extension Wildlife specialist; and Ginger M. Allen, Wildlife Biological Scientist; both of University of Florida, Southwest Florida REC, Immokalee, FL 34142; and Joe Schaefer, Professor and Extension Wildlife Specialist; Wildlife Ecology and Conservation Department Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville 32611.

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susceptibility may differ geographically. For example, the northern Eastern red cedar (*Juniperus virginiana*) may be severely damaged by deer in northern states.

### **For Additional Information**

Main, M., J.M. Schaefer and G.M. Allen. 1999. Coping With Deer Damage in Florida. Extension sheet WEC-135, Dep. of Wildlife Ecology & Conservation, Cooperative Extension Service, Institute of Food and Agricultural Sciences, Univ. of Florida, Gainesville, 32611.

Horton, J.L., and W.D. Edge. 1994. Deer-resistant Ornamental Plants. Extension sheet 1440, Oregon State University Extension Service, Administrative Services A422, Corvallis, OR, 97331-2119.

Schaefer, J.M. and M.B. Main. Florida's White-Tailed Deer. Extension sheet SS-WEC-11, Dep. of Wildlife Ecology & Conservation, Cooperative Extension Service, Institute of Food and Agricultural Sciences, Univ. of Florida, Gainesville, 32611.

### **Acknowledgements**

Collier County, FL Master Gardener Extension Specialists.

Survey participants, Horticultural Extension Specialists.

**Table 1.** Trees listed by susceptibility to damage from deer in Florida.

| <b>Frequent or Severe Damage</b>     |                                |                                     |
|--------------------------------------|--------------------------------|-------------------------------------|
| <b>Common Name</b>                   | <b>Botanical Name</b>          | <b>Comments</b>                     |
| Black cherry                         | <i>Prunus serotina</i>         | North & central Florida             |
| Carolina laurel cherry               | <i>Prunus carolina</i>         | Large quantities fatal to livestock |
| Crabapple                            | <i>Malus spp.</i>              | Sapling and fruit removal           |
| Flatwoods plum                       | <i>Prunus umbellata</i>        | Edible fruit                        |
| Pear                                 | <i>Pyrus spp.</i>              | Sapling and fruit removal           |
| <b>Occasional or Moderate Damage</b> |                                |                                     |
| Citrus                               | <i>Citrus spp.</i>             | Young trees                         |
| Red maple                            | <i>Acer rubrum</i>             | Occasionally severe damage          |
| Schefflera                           | <i>Schefflera actinophylla</i> | Not resistant                       |
| White oak                            | <i>Quercus alba</i>            | North Florida                       |
| Willow                               | <i>Salix spp.</i>              | New growth preferred by deer        |
| <b>Rare or Minor Damage</b>          |                                |                                     |
| American beech                       | <i>Fagus grandiflora</i>       | Resistant                           |
| Australian pine                      | <i>Casuarina equisetifolia</i> | Resistant                           |
| Bottlebrush                          | <i>Melaleuca quinquenervia</i> | Resistant                           |
| Butterfly/cabada palms               | <i>Chrysalidocarpus spp.</i>   | Resistant                           |
| Cabbage/palmettos                    | <i>Sabal spp.</i>              | Resistant                           |
| Christmas palms                      | <i>Veitchia spp.</i>           | Resistant                           |
| Coconut palm                         | <i>Cocos nucifera</i>          | Resistant                           |
| Crape myrtle                         | <i>Lagerstroemia indica</i>    | Resistant                           |
| Date palms                           | <i>Phoenix spp.</i>            | Resistant                           |
| Edible fig                           | <i>Ficus carica</i>            | Resistant                           |
| Eucalyptus                           | <i>Eucalyptus cinerea</i>      | Resistant                           |
| Fishtail palms                       | <i>Caryota spp.</i>            | Resistant                           |
| Flowering dogwood                    | <i>Cornus florida</i>          | Resistant                           |
| Ligustrum                            | <i>Ligustrum spp.</i>          | Resistant                           |
| Live oak                             | <i>Quercus virginiana</i>      | Resistant                           |
| Loquat                               | <i>Eriobotrya japonica</i>     | Resistant                           |
| Magnolia                             | <i>Magnolia spp.</i>           | Resistant                           |
| Orchid tree                          | <i>Bauhinia variegata</i>      | Resistant                           |
| Paurotis palm                        | <i>Acoelorrhaphe wrightii</i>  | Resistant                           |

**Table 1.** Trees listed by susceptibility to damage from deer in Florida.

| Frequent or Severe Damage |                                  |           |
|---------------------------|----------------------------------|-----------|
| Persimmon                 | <i>Diospyros spp.</i>            | Resistant |
| Pineapple guava           | <i>Feijoa spp.</i>               | Resistant |
| Podocarpus                | <i>Podocarpus spp.</i>           | Resistant |
| Pomegranate               | <i>Punica granatum</i>           | Resistant |
| Ponytail, Bottle palm     | <i>Beaucarnea recurvata</i>      | Resistant |
| Queen palm                | <i>Arecastrum romanzoffianum</i> | Resistant |
| Royal palm                | <i>Roystonea spp.</i>            | Resistant |
| Thatch palm               | <i>Thrinax spp.</i>              | Resistant |
| Yaupon                    | <i>Ilex vomitoria</i>            | Resistant |

**Table 2.** Shrubs listed by susceptibility to damage from deer in Florida.

| Frequent or Severe Damage |                           |                                     |
|---------------------------|---------------------------|-------------------------------------|
| Common Name               | Botanical Name            | Comments                            |
| Bougainvillea             | <i>Bougainvillea spp.</i> | Not resistant                       |
| Evergreen Azaleas         | <i>Rhododendron spp.</i>  | Frequently damaged                  |
| Hibiscus                  | <i>Hibiscus spp.</i>      | Not resistant, favorite             |
| Hog plum                  | <i>Prunus umbellata</i>   | North Florida species               |
| Mexican firebush          | <i>Hamelia patens</i>     | Not resistant                       |
| Pittosporum               | <i>Pittosporum tobira</i> | Not resistant, favorite             |
| Rhododendrons             | <i>Rhododendron spp.</i>  | Frequently damaged                  |
| Roses                     | <i>Rosa spp.</i>          | Regular spraying will reduce damage |
| Rare or Minor Damage      |                           |                                     |
| Banana shrub              | <i>Magnolia fuscata</i>   | Resistant                           |
| Bird of Paradise          | <i>Strelitzia reginae</i> | Resistant                           |
| Blackberry                | <i>Rubus spp.</i>         | Only thorny species resistant       |
| Bottlebrush               | <i>Callistemon spp.</i>   | Resistant                           |
| Camellia                  | <i>Camellia spp.</i>      | Resistant                           |
| Carissa                   | <i>Carissa spp.</i>       | Resistant                           |
| Chinese holly             | <i>Ilex cornuta</i>       | Somewhat resistant                  |
| Croton                    | <i>Croton linearis</i>    | Resistant                           |
| Gardenia                  | <i>Gardenia spp.</i>      | Resistant                           |

**Table 2.** Shrubs listed by susceptibility to damage from deer in Florida.

|                         |                               |                                  |
|-------------------------|-------------------------------|----------------------------------|
| Heavenly bamboo         | <i>Nandina spp.</i>           | Resistant                        |
| Ixora                   | <i>Ixora spp.</i>             | Resistant                        |
| Japanese boxwood        | <i>Buxus microphylla</i>      | Resistant                        |
| Juniper                 | <i>Juniperus spp.</i>         | Resistant                        |
| Lantana                 | <i>Lantana camara</i>         | Natives resistant, hybrids not   |
| Mahonia                 | <i>Mahonia spp.</i>           | Resistant                        |
| Myrtle-leaf holly       | <i>Ilex myrtifolia</i>        | Resistant                        |
| Needle palm             | <i>Rhopidophyllum hystrix</i> | Resistant                        |
| Oleander                | <i>Nerium oleander</i>        | Resistant, poisonous             |
| Philodendron            | <i>Philodendron spp.</i>      | Resistant, bugs won't eat either |
| Plumbago                | <i>Plumbago auriculata</i>    | Resistant                        |
| Rutty                   | <i>Ruttya Ruspolia</i>        | Resistant                        |
| Silver thorn            | <i>Elaeagnus spp.</i>         | Resistant                        |
| Southern Indian Azaleas | <i>Rhododendron spp.</i>      | Resistant                        |
| Sweet/tea olive         | <i>Osmanthus fragrans</i>     | Resistant                        |
| Viburnum                | <i>Viburnum spp.</i>          | Resistant                        |
| Wax myrtle              | <i>Myrica cerifera</i>        | Resistant                        |

**Table 3.** Vines & Ground Cover listed by susceptibility to damage from deer in Florida.

| <b>Frequent or Severe Damage</b>     |                                    |                                |
|--------------------------------------|------------------------------------|--------------------------------|
| <b>Common Name</b>                   | <b>Botanical Name</b>              | <b>Comments</b>                |
| Clematis                             | <i>Clematis spp.</i>               | Poisonous to humans            |
| <b>Occasional or Moderate Damage</b> |                                    |                                |
| Trumpet vine                         | <i>Campis radicans</i>             | Central to north Florida       |
| <b>Rare or Minor Damage</b>          |                                    |                                |
| Allamanda                            | <i>Allamanda cathartica</i>        | RResistant                     |
| Asparagus fern                       | <i>Asparagus densiflorus</i>       | Resistant                      |
| Aztec grass                          | <i>Ophiopogon japonicus</i>        | Resistant                      |
| Boston fern                          | <i>Nephrolepis spp.</i>            | Resistant                      |
| English ivy                          | <i>Hedera helix</i>                | Resistant, poisonous to humans |
| Holly fern                           | <i>Lomariopsis kunzeana</i>        | Resistant                      |
| Pampas grass                         | <i>Cortaderia spp.</i>             | Resistant                      |
| Shield fern                          | <i>Dryopteris spp.</i>             | Resistant                      |
| Society garlic                       | <i>Tulbaghia violacea</i>          | Resistant                      |
| Star jasmine                         | <i>Trachelospermum jasminoides</i> | Will eat when under pressure   |
| Wandering Jew                        | <i>Tradescantia zebrina</i>        | RResistant                     |
| Yellow jessamine                     | <i>Gelsemium sempervirens</i>      | Resistant, poisonous to humans |

**Table 4.** Annuals/Perennials & Bulbs listed by susceptibility to damage from deer in Florida.

| <b>Frequent or Severe Damage</b>     |                                   |                                |
|--------------------------------------|-----------------------------------|--------------------------------|
| <b>Common Name</b>                   | <b>Botanical Name</b>             | <b>Comments</b>                |
| Celosia                              | <i>Celosia argenta</i>            | Not resistant                  |
| Corn                                 | <i>Zea mays</i>                   | Not resistant                  |
| Dahlias                              | <i>Dahlia spp.</i>                | Not resistant                  |
| Day lilly                            | <i>Liliaceae spp.</i>             | Not resistant                  |
| Impatiens                            | <i>Impatiens spp.</i>             | Not resistant, favorite        |
| Peas                                 | <i>Pisum sativum</i>              | Not resistant                  |
| Phlox                                | <i>Phlox spp.</i>                 | Not resistant                  |
| Portulaca                            | <i>Portulaca spp.</i>             | Not resistant, favorite        |
| Shrimp plant                         | <i>Beloperone guttata</i>         | Not resistant                  |
| Star flower                          | <i>Trientalis borealis</i>        | Not resistant                  |
| Tomatoes                             | <i>Lycopersicon esculentum</i>    | Not resistant                  |
| <b>Occasional or Moderate Damage</b> |                                   |                                |
| Aster                                | <i>Aster spp.</i>                 | Will eat when under pressure   |
| Begonia                              | <i>Begonia spp.</i>               | Will eat when under pressure   |
| Iris                                 | <i>Iris spp.</i>                  | Somewhat resistant             |
| Zinnia                               | <i>Zinnia spp.</i>                | Will eat when under pressure   |
| <b>Rare or Minor Damage</b>          |                                   |                                |
| Ageratum                             | <i>Ageratum spp.</i>              | Resistant                      |
| Aloe                                 | <i>Aloe spp.</i>                  | Resistant                      |
| Angel flower                         | <i>Angelonia angelonia</i>        | Resistant                      |
| Angles trumpet                       | <i>Datura spp.</i>                | Resistant                      |
| Anise                                | <i>Pimpinella anisum</i>          | Resistant                      |
| Black-eyed Susan                     | <i>Rudbeckia hirta</i>            | Resistant                      |
| Bush daisy                           | <i>Gamolepis chrysanthemoides</i> | Resistant                      |
| Century plant                        | <i>Agave americana</i>            | Resistant, poisonous to humans |
| Cone flower                          | <i>Echinacea spp.</i>             | Resistant                      |
| Coreopsis/Tickseed                   | <i>Coreopsis spp.</i>             | Resistant                      |
| Crown of thorns                      | <i>Euphorbia milli</i>            | Resistant                      |
| Devil's trumpet                      | <i>Datura spp.</i>                | Resistant                      |
| Dusty Miller                         | <i>Senecio cineraria</i>          | Resistant                      |
| Ginger lilly                         | <i>Liliaceae spp.</i>             | Resistant                      |
| Heliconia                            | <i>Heliconia spp.</i>             | Resistant                      |
| Lilly family                         | <i>Dracaena spp.</i>              | Resistant                      |

**Table 4.** Annuals/Perennials & Bulbs listed by susceptibility to damage from deer in Florida.

| Frequent or Severe Damage |                               |                                |
|---------------------------|-------------------------------|--------------------------------|
| Lily of the Nile          | <i>Agapanthus spp.</i>        | Resistant                      |
| Lupine                    | <i>Lupine spp.</i>            | Resistant, poisonous to humans |
| Marigolds                 | <i>Dimorphotheca spp.</i>     | Resistant                      |
| Peace lilly               | <i>Spathiphyllum spp.</i>     | Resistant                      |
| Periwinkle                | <i>Vinca rosea</i>            | Resistant                      |
| Petunia                   | <i>Ruellia spp.</i>           | Resistant                      |
| Rotunda                   | <i>Kaempferia spp.</i>        | Resistant                      |
| Sage                      | <i>Salvia spp.</i>            | Resistant                      |
| Shasta daisy              | <i>Chrysanthemum superbum</i> | Flowers may be eaten           |
| Ti tree                   | <i>Cordyline terminalis</i>   | Resistant                      |
| Trillium, wake robin      | <i>Trillium maculatum</i>     | Resistant, north Florida       |
| Turks cap                 | <i>Malavaviscus arboreus</i>  | Resistant                      |
| Verbena                   | <i>Verbena spp.</i>           | Resistant                      |
| Yucca                     | <i>Yucca spp.</i>             | Resistant                      |