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Results of the North Carolina Invasive Species Assessment System

The potential invasiveness of 25 taxa was assessed using the North Carolina Assessment System for Potentially Invasive Plant Species Sold in the North Carolina Horticultural Trade.

Table 4.1 Highly invasive species and associated assessment point values

Taxa	Total assessment points
<i>Vitex rotundifolia</i> (Beach vitex)	81*
<i>Lonicera japonica</i> (Japanese honeysuckle)	75
<i>Celastrus orbiculatus</i> (Oriental bittersweet)	71

*Environmental impacts associated with this species have been documented in coastal areas of North Carolina.

Three species were categorized as Highly Invasive. These plants are invasive and may not be recommended for horticultural use in North Carolina. As defined by the National Invasive Species Council (2006), the economic or environmental harm or harm to human health attributed to invasive species outweighs any beneficial effects associated with these species. These species present relatively high ecological impact, distribution and invasive potential, and management difficulty in relation to economic value. Highly ranked species received an overall score of 67 – 100 points in the North Carolina assessment.

Table 4.2 Moderately weedy species and associated assessment point values.

Taxa	Total assessment points
<i>Ligustrum sinense</i> (Chinese privet)	66
<i>Berberis thunbergii</i> (Japanese barberry)	61
<i>Hedera helix</i> (English ivy)	49
<i>Pyrus calleryana</i> (Callery pear)	43
<i>Mahonia bealei</i> (Leatherleaf mahonia)	42
<i>Euonymus alatus</i> (Burning bush)	41
<i>Wisteria floribunda</i> and/or <i>W. sinensis</i> (Japanese and/or Chinese wisteria)	37
<i>Nandina domestica</i> (Nandina, Heavenly bamboo)	35
<i>Ligustrum japonicum</i> (Japanese privet)	34

Nine species were categorized as Moderately Weedy. According to the Assessment results, these species are not considered by definition to be invasive, since the economic or environmental harm associated with these species has not been shown to outweigh any beneficial effects associated with these plants. Moderately weedy species have less than high ecological impact, distribution and invasive potential, and management difficulty in relation to economic value. Moderately weedy plants may be recommended for horticultural use with specific guidance. These plants should not be grown in close proximity to natural areas that have communities similar to those where this plant has been found to naturalize or near natural areas that have sensitive or threatened plants and/or natural communities. In areas where these species have been found to be problematic, alternative plants may be recommended. Moderately ranked species received an overall score of 34 - 66 points in the North Carolina assessment.

Table 4.3 Noninvasive species and associated assessment point values.

Taxa	Total assessment points
<i>Elaeagnus pungens</i> Thunb. and <i>Elaeagnus x ebbingei</i> (Thorny elaeagnus)	33
<i>Spiraea japonica</i> and/or <i>S. x bumalda</i> (Japanese spiraea)	33
<i>Albizia julibrissin</i> (Mimosa)	31
<i>Ulmus parvifolia</i> (Chinese elm, Lacebark elm)	31
<i>Buddleja davidii</i> (Butterfly-bush)	26
<i>Vinca minor</i> (Common periwinkle)	26

<i>Miscanthus sinensis</i> (Chinese silvergrass)	18
<i>Magnolia stellata</i> (Star magnolia)	12
<i>Ginkgo biloba</i> (Ginkgo, Maidenhair tree)	4
<i>Styrax japonicas</i> (Japanese snowbell)	4
<i>Camellia japonica</i> (Camellia)	-1
Evergreen azaleas	-2
<i>Ophiopogon japonicus</i> and <i>Liriope</i> species (Mondo grass, lily turf, liriope)	-5

Thirteen species were categorized as Noninvasive. These species have limited ecological impact, distribution and invasive potential, and management difficulty in relation to economic value. They may be locally problematic but their reproductive biology and other traits limit their rate of invasion to natural areas. Some species, such as *B. davidii*, may exhibit environmental impacts in other parts of the U.S., but they have not been shown to negatively affect natural areas in North Carolina. Low ranked species received an overall score of 0 – 33 in the North Carolina assessment. Negative point values are associated with noninvasive species with extremely high economic value in North Carolina.

LITERATURE CITED

The National Invasive Species Council. 2006. Invasive species definition clarification and guidance white paper.

(<http://www.invasivespeciesinfo.gov/docs/council/isacdef.pdf>) Accessed June 15, 2009.