Australia/New Zealand Weed Risk Assessment adapted for Florida.


**Agave americana (century plant)**

<table>
<thead>
<tr>
<th>Question number</th>
<th>Question</th>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01</td>
<td>Is the species highly domesticated?</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>1.02</td>
<td>Has the species become naturalised where grown?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.03</td>
<td>Does the species have weedy races?</td>
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<tr>
<td>2.01</td>
<td>Species suited to Florida's USDA climate zones (0-low; 1-intermediate; 2-high)</td>
<td>2</td>
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<tr>
<td>2.02</td>
<td>Quality of climate match data (0-low; 1-intermediate; 2-high)</td>
<td>2</td>
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<tr>
<td>2.03</td>
<td>Broad climate suitability (environmental versatility)</td>
<td></td>
<td></td>
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<tr>
<td>2.04</td>
<td>Native or naturalized in habitats with periodic inundation n?</td>
<td></td>
<td></td>
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<tr>
<td>2.05</td>
<td>Does the species have a history of repeated introductions outside its natural range?</td>
<td>y</td>
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<tr>
<td>3.01</td>
<td>Naturalized beyond native range</td>
<td>y</td>
<td>0</td>
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<tr>
<td>3.02</td>
<td>Garden/amenity/disturbance weed</td>
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<tr>
<td>3.03</td>
<td>Weed of agriculture</td>
<td>y</td>
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</tr>
<tr>
<td>3.04</td>
<td>Environmental weed</td>
<td>y</td>
<td>0</td>
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<tr>
<td>3.05</td>
<td>Congeneric weed</td>
<td>y</td>
<td>0</td>
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<tr>
<td>4.01</td>
<td>Produces spines, thorns or burrs</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td>4.02</td>
<td>Allelopathic</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>4.03</td>
<td>Parasitic</td>
<td>n</td>
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<tr>
<td>4.04</td>
<td>Unpalatable to grazing animals</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>4.05</td>
<td>Toxic to animals</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>4.06</td>
<td>Host for recognised pests and pathogens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.07</td>
<td>Causes allergies or is otherwise toxic to humans</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td>4.08</td>
<td>Creates a fire hazard in natural ecosystems</td>
<td>n</td>
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</tr>
<tr>
<td>4.09</td>
<td>Is a shade tolerant plant at some stage of its life cycle</td>
<td>n</td>
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</tr>
<tr>
<td>4.1</td>
<td>Grows on infertile soils (oligotrophic, limerock, or excessively draining soils)</td>
<td>y</td>
<td>1</td>
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<tr>
<td>4.11</td>
<td>Climbing or smothering growth habit</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>4.12</td>
<td>Forms dense thickets</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td>5.01</td>
<td>Aquatic</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>5.02</td>
<td>Grass</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>5.03</td>
<td>Nitrogen fixing woody plant</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>5.04</td>
<td>Geophyte</td>
<td>n</td>
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<tr>
<td>6.01</td>
<td>Evidence of substantial reproductive failure in native habitat</td>
<td></td>
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</tr>
<tr>
<td>6.02</td>
<td>Produces viable seed</td>
<td>y</td>
<td>1</td>
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<tr>
<td></td>
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<td></td>
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<td>---</td>
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<tr>
<td>6.03</td>
<td>Hybridizes naturally</td>
<td>y</td>
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<tr>
<td>6.04</td>
<td>Self-compatible or apomictic</td>
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<tr>
<td>6.05</td>
<td>Requires specialist pollinators</td>
<td>?</td>
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<tr>
<td>6.06</td>
<td>Reproduction by vegetative fragmentation</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td>6.07</td>
<td>Minimum generative time (years)</td>
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</tr>
<tr>
<td>7.01</td>
<td>Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)</td>
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</tr>
<tr>
<td>7.02</td>
<td>Propagules dispersed intentionally by people</td>
<td>y</td>
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<tr>
<td>7.03</td>
<td>Propagules likely to disperse as a produce contaminant</td>
<td>n</td>
<td>-1</td>
</tr>
<tr>
<td>7.04</td>
<td>Propagules adapted to wind dispersal</td>
<td>n</td>
<td>-1</td>
</tr>
<tr>
<td>7.05</td>
<td>Propagules water dispersed</td>
<td>n</td>
<td>-1</td>
</tr>
<tr>
<td>7.06</td>
<td>Propagules bird dispersed</td>
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<tr>
<td>7.07</td>
<td>Propagules dispersed by other animals (externally)</td>
<td>n</td>
<td>-1</td>
</tr>
<tr>
<td>7.08</td>
<td>Propagules dispersed by other animals (internally)</td>
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<tr>
<td>8.01</td>
<td>Prolific seed production</td>
<td>n</td>
<td>-1</td>
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<tr>
<td>8.02</td>
<td>Evidence that a persistent propagule bank is formed (&gt;1 yr)</td>
<td></td>
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<tr>
<td>8.03</td>
<td>Well controlled by herbicides</td>
<td>y</td>
<td>-1</td>
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<tr>
<td>8.04</td>
<td>Tolerates, or benefits from, mutilation or cultivation</td>
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<tr>
<td>8.05</td>
<td>Effective natural enemies present in Florida, or east of the continental divide</td>
<td></td>
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</tbody>
</table>

**Total Score** 14

<p>| | | |</p>
<table>
<thead>
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<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Reject</strong>*</td>
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<table>
<thead>
<tr>
<th>section</th>
<th># questions answered</th>
<th>satisfy minimum?</th>
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<tbody>
<tr>
<td>A</td>
<td>7</td>
<td>yes</td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>yes</td>
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<tr>
<td>C</td>
<td>14</td>
<td>yes</td>
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<tr>
<td>total</td>
<td>31</td>
<td>yes</td>
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Data collected 2006-2007
<table>
<thead>
<tr>
<th>Question number</th>
<th>Reference</th>
<th>Source data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01</td>
<td></td>
<td>cultivated, but no evidence of selection for reduced weediness</td>
</tr>
<tr>
<td>1.02</td>
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<tr>
<td>1.03</td>
<td></td>
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</tr>
<tr>
<td>2.01</td>
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<td></td>
</tr>
<tr>
<td>2.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.02</td>
<td>Waterhouse (1997) The major invertebrate pests and weeds of agriculture and plantation forestry in the southern and western Pacific. ACIAR Monograph No. 44, 99p.</td>
<td>no evidence</td>
</tr>
<tr>
<td>3.03</td>
<td>Waterhouse (1997) The major invertebrate pests and weeds of agriculture and plantation forestry in the southern and western Pacific. ACIAR Monograph No. 44, 99p.</td>
<td>considered a major weed of agriculture in the southern and western Pacific (table 11)</td>
</tr>
<tr>
<td>4.01</td>
<td>Dehgan (1998) Landscape Plants for Subtropical Climates. University Press of Florida.</td>
<td>&quot;leaves are…fibrous with a sharp terminal black spine; often have sharp marginal teeth&quot;</td>
</tr>
<tr>
<td>4.06</td>
<td></td>
<td>causes dermatitis in humans</td>
</tr>
<tr>
<td>4.07</td>
<td></td>
<td>no evidence</td>
</tr>
<tr>
<td>4.11</td>
<td></td>
<td>terrestrial</td>
</tr>
<tr>
<td>5.02</td>
<td></td>
<td>not nitrogen fixing (and Agavaceae)</td>
</tr>
<tr>
<td>6.02</td>
<td>Gentry (1982) Agaves of Continental North America. The University of Arizona Press.</td>
<td>Morphological intermediates between <em>A. americana</em> and <em>A. scabra</em> have been observed along the eastern edges of the Chihuahuan or Coahuilan Desert, &quot;seeming to express interspecific hybrids&quot;.</td>
</tr>
<tr>
<td>6.05</td>
<td>Gentry (1982) Agaves of Continental North America. The University of Arizona Press.</td>
<td>Bats are important pollinators of agaves, and agave flowers are also visited by hummingbirds, other birds, and insects. [primary pollinators are specialists]</td>
</tr>
<tr>
<td>7.03</td>
<td>Dehgan (1998) Landscape Plants for Subtropical Climates. University Press of Florida.</td>
<td>seeds germinate on plant and then fall to the ground and root</td>
</tr>
<tr>
<td>7.05</td>
<td>no evidence</td>
<td></td>
</tr>
<tr>
<td>7.06</td>
<td>no evidence</td>
<td></td>
</tr>
</tbody>
</table>