

Australia/New Zealand Weed Risk Assessment adapted for Florida.

Data used for analysis published in: Gordon, D.R., D.A. Onderdonk, A.M. Fox, R.K. Stocker, and C. Gantz. 2008. Predicting Invasive Plants in Florida using the Australian Weed Risk Assessment. Invasive Plant Science and Management 1: 178-195.

| <i>Arachis glabrata (perennial peanut)</i> | | | |
|--|--|--------|-------|
| Question number | Question | Answer | Score |
| 1.01 | Is the species highly domesticated? | y | -3 |
| 1.02 | Has the species become naturalised where grown? | n | -1 |
| 1.03 | Does the species have weedy races? | | |
| 2.01 | Species suited to Florida's USDA climate zones (0-low; 1-intermediate; 2-high) | 2 | |
| 2.02 | Quality of climate match data (0-low; 1-intermediate; 2-high) | 2 | |
| 2.03 | Broad climate suitability (environmental versatility) | | |
| 2.04 | Native or naturalized in habitats with periodic inundation | | |
| 2.05 | Does the species have a history of repeated introductions outside its natural range? | y | |
| 3.01 | Naturalized beyond native range | n | -2 |
| 3.02 | Garden/amenity/disturbance weed | n | 0 |
| 3.03 | Weed of agriculture | n | 0 |
| 3.04 | Environmental weed | n | 0 |
| 3.05 | Congeneric weed | n | 0 |
| 4.01 | Produces spines, thorns or burrs | n | 0 |
| 4.02 | Allelopathic | n | 0 |
| 4.03 | Parasitic | n | 0 |
| 4.04 | Unpalatable to grazing animals | n | -1 |
| 4.05 | Toxic to animals | n | 0 |
| 4.06 | Host for recognised pests and pathogens | n | 0 |
| 4.07 | Causes allergies or is otherwise toxic to humans | n | 0 |
| 4.08 | Creates a fire hazard in natural ecosystems | n | 0 |
| 4.09 | Is a shade tolerant plant at some stage of its life cycle | ? | |
| 4.1 | Grows on infertile soils (oligotrophic, limerock, or excessively draining soils) | y | 1 |
| 4.11 | Climbing or smothering growth habit | n | 0 |
| 4.12 | Forms dense thickets | n | 0 |

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| 5.01 | Aquatic | n | 0 |
| 5.02 | Grass | n | 0 |
| 5.03 | Nitrogen fixing woody plant | n | 0 |
| 5.04 | Geophyte | n | 0 |
| 6.01 | Evidence of substantial reproductive failure in native habitat | | |
| 6.02 | Produces viable seed | n | -1 |
| 6.03 | Hybridizes naturally | | |
| 6.04 | Self-compatible or apomictic | | |
| 6.05 | Requires specialist pollinators | | |
| 6.06 | Reproduction by vegetative fragmentation | y | 1 |
| 6.07 | Minimum generative time (years) | | |
| 7.01 | Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas) | | |
| 7.02 | Propagules dispersed intentionally by people | y | 1 |
| 7.03 | Propagules likely to disperse as a produce contaminant | n | -1 |
| 7.04 | Propagules adapted to wind dispersal | n | -1 |
| 7.05 | Propagules water dispersed | n | -1 |
| 7.06 | Propagules bird dispersed | n | -1 |
| 7.07 | Propagules dispersed by other animals (externally) | n | -1 |
| 7.08 | Propagules dispersed by other animals (internally) | n | -1 |
| 8.01 | Prolific seed production | n | -1 |
| 8.02 | Evidence that a persistent propagule bank is formed (>1 yr) | | |
| 8.03 | Well controlled by herbicides | | |
| 8.04 | Tolerates, or benefits from, mutilation or cultivation | y | 1 |
| 8.05 | Effective natural enemies present in Florida, or east of the continental divide | | |
| Total Score | | | -11 |

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| Outcome | Accept* |
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*Used secondary screen from: Daehler, C. C., J.L. Denslow, S. Ansari, and H. Kuo. 2004. A risk assessment system for screening out harmful invasive pest plants from Hawaii's and other Pacific islands. *Conserv. Biol.* 18: 360-368.

| section | # questions answered | satisfy minimum? |
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| A | 7 | yes |
| B | 11 | yes |
| C | 15 | yes |
| total | 33 | yes |

Data collected 2006-2007

| Question number | Reference | Source data |
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| 1.01 | | |
| 1.02 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "The peanut grows on its original planting site unless physically moved to other sites." [and no evidence of naturalization] |
| 1.03 | | |
| 2.01 | 1. Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdf/EP/EP13500.pdf). 2. FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | 1. "The perennial peanut...is adapted to subtropical and warm temperate climates." 2. "It grows best when mean monthly temperatures are above about 20°C." |
| 2.02 | | |
| 2.03 | | |
| 2.04 | | |
| 2.05 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | "Native to Brazil, Argentina and Paraguay between 13° S and 28° S. Introduced to Australia, the United States, India, Thailand, Malaysia and Indonesia." |
| 3.01 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "The peanut grows on its original planting site unless physically moved to other sites." [and no evidence of naturalization] |
| 3.02 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "The peanut grows on its original planting site unless |

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| | | physically moved to other sites." [and no evidence of weediness] |
| 3.03 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "The peanut grows on its original planting site unless physically moved to other sites." [and no evidence of weediness] |
| 3.04 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "The peanut grows on its original planting site unless physically moved to other sites." [and no evidence of weediness] |
| 3.05 | | no evidence |
| 4.01 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | no description of these traits |
| 4.02 | | no evidence |
| 4.03 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | no description of this |
| 4.04 | French, Prine, and Blount (2006) Perennial peanut: an alternative forage of growing importance. University of Florida, IFAS Extension, SS-AGR-39 (http://edis.ifas.ufl.edu/pdffiles/AA/AA14800.pdf). | "Perennial peanut is highly palatable to most livestock" |
| 4.05 | 1. French, Prine, and Blount (2006) Perennial peanut: an alternative forage of growing importance. University of Florida, IFAS Extension, SS-AGR-39 (http://edis.ifas.ufl.edu/pdffiles/AA/AA14800.pdf). 2. FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | 1. Perennial peanut is used as a forage, as hay, and as silage for horses, cattle, sheep, and goats. 2. No toxicity recorded. |
| 4.06 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "no insect, disease, or nematode pests have been identified that cause economic loss" |
| 4.07 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | No toxicity recorded. |
| 4.08 | | no evidence |
| 4.09 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "Perennial peanut grows best in full sun" but "will persist in partial shade" |
| 4.1 | Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | "This rhizomatous legume is adapted to well-drained soils, particularly deep sands" |
| 4.11 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | "Herbaceous perennial with erect to decumbent |

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| | | unbranched stems" |
| 4.12 | | no evidence |
| 5.01 | | terrestrial |
| 5.02 | USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. | Fabaceae |
| 5.03 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "The peanut legume, in association with Rhizobium, fixes atmospheric N." [but is herbaceous] |
| 5.04 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | "with a deep, woody taproot" |
| 6.01 | | |
| 6.02 | 1. Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). 2. Prine, Dunavin, Moore, and Roush (1981) 'Florigraze' Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-275. 3. FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | 1. "Rhizomal perennial peanut does not reproduce by seed" 2. "Seeds develop very rarely on these three [cultivars of] rhizoma peanuts." 3. fruit set scarce |
| 6.03 | | |
| 6.04 | | |
| 6.05 | | |
| 6.06 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "Perennial peanut is propagated vegetatively using rhizomes" |
| 6.07 | | |
| 7.01 | | |
| 7.02 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "In Guanacaste Province, Costa Rica, medians, lawns, hotel entryways, and roadsides are planted with perennial peanut." |
| 7.03 | | no evidence |
| 7.04 | | fruit is a peanut (and fruit set scarce) |
| 7.05 | | fruit is a peanut (and fruit set scarce) |
| 7.06 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "Rhizomal perennial peanut does not reproduce by seed; therefore, it can't be carried |

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| | | by birds or wildlife or transported in plant material to unintended areas." |
| 7.07 | FAO, Grassland Index (http://www.fao.org/ag/AGP/AGPC/doc/Gbase/DATA/Pf000007.HTM). | fruit set scarce [and no evidence of any means of attachment] |
| 7.08 | Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). | "Rhizomal perennial peanut does not reproduce by seed; therefore, it can't be carried by birds or wildlife or transported in plant material to unintended areas." |
| 8.01 | 1. Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). 2. Prine, Dunavin, Moore, and Roush (1981) 'Florigraze' Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-275. | 1. "Rhizomal perennial peanut does not reproduce by seed" 2. "Seeds develop very rarely on these three [cultivars of] rhizoma peanuts." |
| 8.02 | | |
| 8.03 | | |
| 8.04 | 1. Rouse, Miavitz, and Roka (2004) Guide to using rhizomal perennial peanut in the urban landscape. University of Florida, IFAS Extension, HS960 (http://edis.ifas.ufl.edu/pdffiles/EP/EP13500.pdf). 2. Prine, Dunavin, Glennon, and Roush (1986) Arbrook Rhizoma Peanut: A Perennial Forage Legume. University of Florida, IFAS, Agricultural Experiment Stations, Circular S-332. | 1. Perennial peanut tolerates mowing and grazing. BUT 2. "The rhizoma peanut is easily killed by plowing the soil with a moldboard plow and harrowing several times at intervals to kill sprouting shoots." |
| 8.05 | | |