**Taxon:** Osmoxylon novoguineense (Scheff.) Becc. **Family:** Araliaceae

**Common Name(s):** fuzzy wrinkle
miagos bush
old man's hand
Osmoxylon

**Synonym(s):** Boerlagiodendron novoguineense
Trevesia novoguineensis Scheff.

**Assessor:** Chuck Chimera **Status:** Assessor Approved **End Date:** 19 May 2016

**WRA Score:** 2.0 **Designation:** EVALUATE **Rating:** Evaluate

**Keywords:** Tropical, Tree / Shrub, Ornamental, Fleshy-fruit, Bird-dispersed

| Qsn # | Question | Answer Option | Answer |
|---|---|---|---|
| 101 | Is the species highly domesticated? | y=-3, n=0 | n |
| 102 | Has the species become naturalized where grown? | | |
| 103 | Does the species have weedy races? | | |
| 201 | Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical" | (0-low; 1-intermediate; 2-high) (See Appendix 2) | High |
| 202 | Quality of climate match data | (0-low; 1-intermediate; 2-high) (See Appendix 2) | High |
| 203 | Broad climate suitability (environmental versatility) | y=1, n=0 | y |
| 204 | Native or naturalized in regions with tropical or subtropical climates | y=1, n=0 | y |
| 205 | Does the species have a history of repeated introductions outside its natural range? | y=-2, ?=-1, n=0 | ? |
| 301 | Naturalized beyond native range | y = 1*multiplier (see Appendix 2), n= question 205 | n |
| 302 | Garden/amenity/disturbance weed | n=0, y = 1*multiplier (see Appendix 2) | n |
| 303 | Agricultural/forestry/horticultural weed | n=0, y = 2*multiplier (see Appendix 2) | n |
| 304 | Environmental weed | n=0, y = 2*multiplier (see Appendix 2) | n |
| 305 | Congeneric weed | n=0, y = 1*multiplier (see Appendix 2) | n |
| 401 | Produces spines, thorns or burrs | y=1, n=0 | n |
| 402 | Allelopathic | | |
| 403 | Parasitic | y=1, n=0 | n |
| 404 | Unpalatable to grazing animals | | |
| 405 | Toxic to animals | y=1, n=0 | n |
| 406 | Host for recognized pests and pathogens | | |
| 407 | Causes allergies or is otherwise toxic to humans | y=1, n=0 | n |
| 408 | Creates a fire hazard in natural ecosystems | y=1, n=0 | n |

| Qsn # | Question | Answer Option | Answer |
|---|---|---|---|
| 409 | Is a shade tolerant plant at some stage of its life cycle | | |
| 410 | Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island) | | |
| 411 | Climbing or smothering growth habit | y=1, n=0 | n |
| 412 | Forms dense thickets | | |
| 501 | Aquatic | y=5, n=0 | n |
| 502 | Grass | y=1, n=0 | n |
| 503 | Nitrogen fixing woody plant | y=1, n=0 | n |
| 504 | Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers) | y=1, n=0 | n |
| 601 | Evidence of substantial reproductive failure in native habitat | y=1, n=0 | n |
| 602 | Produces viable seed | y=1, n=-1 | y |
| 603 | Hybridizes naturally | | |
| 604 | Self-compatible or apomictic | | |
| 605 | Requires specialist pollinators | | |
| 606 | Reproduction by vegetative fragmentation | | |
| 607 | Minimum generative time (years) | | |
| 701 | Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas) | | |
| 702 | Propagules dispersed intentionally by people | y=1, n=-1 | y |
| 703 | Propagules likely to disperse as a produce contaminant | y=1, n=-1 | n |
| 704 | Propagules adapted to wind dispersal | y=1, n=-1 | n |
| 705 | Propagules water dispersed | y=1, n=-1 | n |
| 706 | Propagules bird dispersed | y=1, n=-1 | y |
| 707 | Propagules dispersed by other animals (externally) | | |
| 708 | Propagules survive passage through the gut | y=1, n=-1 | y |
| 801 | Prolific seed production (>1000/m2) | | |
| 802 | Evidence that a persistent propagule bank is formed (>1 yr) | | |
| 803 | Well controlled by herbicides | | |
| 804 | Tolerates, or benefits from, mutilation, cultivation, or fire | | |
| 805 | Effective natural enemies present locally (e.g. introduced biocontrol agents) | | |

**Supporting Data:**

| Qsn # | Question | Answer |
|---|---|---|
| 101 | **Is the species highly domesticated?** | **n** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | No evidence of domestication |

| Qsn # | Question | Answer |
|---|---|---|
| 102 | **Has the species become naturalized where grown?** | |
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | NA |

| Qsn # | Question | Answer |
|---|---|---|
| 103 | **Does the species have weedy races?** | |
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | NA |

| Qsn # | Question | Answer |
|---|---|---|
| 201 | **Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"** | **High** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Distr. Solomon Is.; in Malesia: throughout New Guinea and in the Bismarck Archipelago." |

| Qsn # | Question | Answer |
|---|---|---|
| 202 | **Quality of climate match data** | **High** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | |

| Qsn # | Question | Answer |
|---|---|---|
| 203 | **Broad climate suitability (environmental versatility)** | **y** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Found in tropical climates, but elevation range exceeds 1000 m, demonstrating environmental versatility] "Ecol. Primary and second-growth forest, from sea-level to 1600 m." |

| Qsn # | Question | Answer |
|---|---|---|
| **204** | **Native or naturalized in regions with tropical or subtropical climates** | **y** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Distr. Solomon Is.; in Malesia: throughout New Guinea and in the Bismarck Archipelago." |

| | | |
|---|---|---|
| **205** | **Does the species have a history of repeated introductions outside its natural range?** | **?** |
| | **Source(s)** | **Notes** |
| | Top Tropicals. 2016. Osmoxylon novoguineense. https://toptropicals.com/catalog/uid/Osmoxylon_novoguineensis.htm. [Accessed 18 May 2016] | "This extremely rare plant has the largest leaf in Aralia family." [Cultivated, but unknown how often it has been planted outside its native range] |
| | Imada, C.T., Staples, G.W. & Herbst, D.R. 2005. Annotated Checklist of Cultivated Plants of Hawai'i. http://www2.bishopmuseum.org/HBS/botany/cultivatedplants/. [Accessed 18 May 2016] | Osmoxylon novoguineense (Scheffer) Beccari (Confirmed)<br>Synonyms:<br>Syn. Boerlagiodendron novoguineense (Scheffer) Harms<br>First Collected: 1986<br>Locations:<br>Pacific Tropical Botanical Garden (now National Tropical Botanical Garden)<br>Waimea Arboretum & Botanical Garden (Confirmed) |

| | | |
|---|---|---|
| **301** | **Naturalized beyond native range** | **n** |
| | **Source(s)** | **Notes** |
| | Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | No evidence |
| | Wagner, W.L., Herbst, D.R.& Lorence, D.H. 2016. Flora of the Hawaiian Islands. Smithsonian Institution, Washington, D.C. http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/index.htm. [Accessed ] | No evidence |

| | | |
|---|---|---|
| **302** | **Garden/amenity/disturbance weed** | **n** |
| | **Source(s)** | **Notes** |
| | Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | No evidence |

| | | |
|---|---|---|
| **303** | **Agricultural/forestry/horticultural weed** | **n** |
| | **Source(s)** | **Notes** |
| | Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | No evidence |

| Qsn # | Question | Answer |
|---|---|---|
| **304** | **Environmental weed** | **n** |
| | **Source(s)** | **Notes** |
| | Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | No evidence |

| 305 | Congeneric weed | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | No evidence |

| 401 | Produces spines, thorns or burrs | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [No evidence] "Tree or shrub, unbranched or sparingly branched, up to 16 m, the young parts rufous-furfuraceous, glabrescent. Large leaves forming terminal crowns; petiole up to 1 m, stout (1-2 cm broad), flattened above, with a sheathing base prolonged as a strong stipular ligule up to 7 cm long, and with fimbriate crests encircling the lower part of the petiole" |

| 402 | Allelopathic | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown |

| 403 | Parasitic | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Tree or shrub, unbranched or sparingly branched, up to 16 m" [Araliaceae. No evidence] |

| 404 | Unpalatable to grazing animals | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown, although fruit may be consumed by animals |

| Qsn # | Question | Answer |
|---|---|---|
| **405** | **Toxic to animals** | **n** |
| | **Source(s)** | **Notes** |
| | Quattrocchi, U. 2012. CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL | No evidence |
| | Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL | No evidence |

| 406 | Host for recognized pests and pathogens | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown |

| 407 | Causes allergies or is otherwise toxic to humans | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Quattrocchi, U. 2012. CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL | "Osmoxylon micranthum ... Leaves rubbed on centipede bites; leaves chewed to relieve backache." [No evidence. Related taxon used medicinally] |
| | Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL | No evidence |

| 408 | Creates a fire hazard in natural ecosystems | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | No evidence that genus members are part of fire prone communities |

| 409 | Is a shade tolerant plant at some stage of its life cycle | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Ecol. Primary and second-growth forest" [Possibly shade tolerant] |
| | Top Tropicals. 2016. Osmoxylon novoguineense. https://toptropicals.com/catalog/uid/Osmoxylon_novoguineensis.htm. [Accessed 18 May 2016] | "It will thrive best in filtered bright light" |

| Qsn # | Question | Answer |
|---|---|---|
| **410** | **Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)** | |
| | **Source(s)** | **Notes** |
| | Top Tropicals. 2016. Osmoxylon novoguineense. https://toptropicals.com/catalog/uid/Osmoxylon_novoguineensis.htm. [Accessed 18 May 2016] | "prefers moist soil and high humidity." |

| 411 | Climbing or smothering growth habit | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Tree or shrub, unbranched or sparingly branched, up to 16 m" |

| 412 | Forms dense thickets | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Unknown] "Primary and second-growth forest, from sea-level to 1600 m." |

| 501 | Aquatic | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Terrestrial tree] "Primary and second-growth forest, from sea-level to 1600 m." |

| 502 | Grass | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 18 May 2016] | Family: Araliaceae<br>Subfamily: Aralioideae |

| 503 | Nitrogen fixing woody plant | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 18 May 2016] | Family: Araliaceae<br>Subfamily: Aralioideae |

| Qsn # | Question | Answer |
|---|---|---|
| **504** | **Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)** | **n** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Tree or shrub, unbranched or sparingly branched, up to 16 m, the young parts rufous- furfuraceous, glabrescent. Large leaves forming terminal crowns" |

| | | |
|---|---|---|
| **601** | **Evidence of substantial reproductive failure in native habitat** | **n** |
| | **Source(s)** | **Notes** |
| | Flora Malesiana. 2016. Osmoxylon novoguineense. http://portal.cybertaxonomy.org/flora-malesiana/node/5243. [Accessed 18 May 2016] | [No evidence] "Distribution: Asia-Tropical:, Bismarck Archipelago (Bismarck Archipelago); New Guinea Solomon Is: Solomon Is.; in Malesia: throughout New Guinea and in the Bismarck Archipelago." |

| | | |
|---|---|---|
| **602** | **Produces viable seed** | **y** |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Presumably Yes] "Fruits on stiff" radiating pedicels, ovoid or spherical, fleshy, ribbed when dry." |

| | | |
|---|---|---|
| **603** | **Hybridizes naturally** | |
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown |

| | | |
|---|---|---|
| **604** | **Self-compatible or apomictic** | |
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Unknown] "Inflorescence terminal, a large compound umbel, bowl-shaped, up to 35 cm 0; peduncle up to 10 cm, stout, with lanceolate caducous bracts (c. 4 cm long) below and among the numerous (c. 50-70) primary rays ; primary rays c. 12-15 cm long at anthesis, c. 3 mm 0, bearing two caducous bracts (1 cm long) at the apex, each ray ending in three branches; central branch c. 2 cm long, bearing an umbel of c. 20-40, sterile, bacciform flowers (c. 6 mm when dry) on pedicels c. 10 mm, and 2-6-celled; the two lateral branches c. 4-6 cm, with two opposite or sub- opposite bracts about the middle, terminating in a subspherical umbel 2^2-3 cm of 30-50 flowers on pedicels c. 8-10 mm long. Calyx rim obsolete, undulate. Petals with irregular erect lobes, tubular below. Stamens 6-10 exserted. Ovary turbinate somewhat angled; glabrous, 6-14-celled; disk flat with a central double row of pustulate stigmas." |

| | | |
|---|---|---|
| **605** | **Requires specialist pollinators** | |
| | **Source(s)** | **Notes** |

| Qsn # | Question | Answer |
|---|---|---|
| | Costion, C.M., & Plunkett, G.M. (2016) A revision of the genus Osmoxylon (Araliaceae) in Palau, including two new species. PhytoKeys 58: 49–64 | [Unknown. Related taxa suspected of being bird-pollinated] "The distribution of the genus Osmoxylon is particularly curious, suggesting a pattern of East Malesian bird dispersal. The inflorescence morphology also appears to be perfectly suited for bird pollination." ... "To date, there have been no published accounts reporting observations on pollination or fruit/seed dispersal in Osmoxylon." ... "We suggest that birds are involved in both pollination (enticed by the pseudo-fruits) and seed dispersal (through the fertile fruits), but observations are needed to record nectar feeding and visits to Osmoxylon inflorescences to feed on the fruits and pseudo-fruits by birds or other potential pollinators." |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Unknown] "Inflorescence terminal, a large compound umbel, bowl-shaped, up to 35 cm 0; peduncle up to 10 cm, stout, with lanceolate caducous bracts (c. 4 cm long) below and among the numerous (c. 50-70) primary rays ; primary rays c. 12-15 cm long at anthesis, c. 3 mm 0, bearing two caducous bracts (1 cm long) at the apex, each ray ending in three branches; central branch c. 2 cm long, bearing an umbel of c. 20-40, sterile, bacciform flowers (c. 6 mm when dry) on pedicels c. 10 mm, and 2-6-celled; the two lateral branches c. 4-6 cm, with two opposite or sub- opposite bracts about the middle, terminating in a subspherical umbel 2^2-3 cm of 30-50 flowers on pedicels c. 8-10 mm long. Calyx rim obsolete, undulate. Petals with irregular erect lobes, tubular below. Stamens 6-10 exserted. Ovary turbinate somewhat angled; glabrous, 6-14-celled; disk flat with a central double row of pustulate stigmas." |

| 606 | Reproduction by vegetative fragmentation | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Tomlinson, P.B. & Zimmerman, M. (eds.). (2010). Tropical Trees as Living Systems. Cambridge University Press, Cambridge, UK | [Unknown. Ability to spread vegetatively present in other species in genus] "Sucker shoots are produced prolifically from the roots of the rice-paper tree (Tetrapanax), and Osmoxylon borneense and related species spread to form extensive thickets on stream banks by rooting of their drooping branches." |

| 607 | Minimum generative time (years) | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown |

| 701 | Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas) | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Unknown] "Fruits on stiff" radiating pedicels, ovoid or spherical, fleshy, ribbed when dry." [Fruits/seeds lack means of external attachment, although small size may enable them to get stuck in mud on boots, tires, clothing etc.] |

| 702 | Propagules dispersed intentionally by people | y |
|---|---|---|

| Qsn # | Question | Answer |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Top Tropicals. 2016. Osmoxylon novoguineense. https://toptropicals.com/catalog/uid/Osmoxylon_novoguineensis.htm. [Accessed 18 May 2016] | "Very ornamental plant, can be grown as a house plant or in a greenhouse." |

| 703 | Propagules likely to disperse as a produce contaminant | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unlikely. Not known to be grown with produce |

| 704 | Propagules adapted to wind dispersal | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "The inflorescence branches are dark purple, the corolla and stamens usually deep red, and the ripe fruit shining purple or blue-black." |
| | Costion, C.M., & Plunkett, G.M. (2016) A revision of the genus Osmoxylon (Araliaceae) in Palau, including two new species. PhytoKeys 58: 49–64 | "We suggest that birds are involved in both pollination (enticed by the pseudo-fruits) and seed dispersal (through the fertile fruits), but observations are needed to record nectar feeding and visits to Osmoxylon inflorescences to feed on the fruits and pseudo-fruits by birds or other potential pollinators." |

| 705 | Propagules water dispersed | n |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Costion, C.M., & Plunkett, G.M. (2016) A revision of the genus Osmoxylon (Araliaceae) in Palau, including two new species. PhytoKeys 58: 49–64 | [Adapted for consumption and internal dispersal] "We suggest that birds are involved in both pollination (enticed by the pseudo-fruits) and seed dispersal (through the fertile fruits), but observations are needed to record nectar feeding and visits to Osmoxylon inflorescences to feed on the fruits and pseudo-fruits by birds or other potential pollinators." |

| Qsn # | Question | Answer |
|---|---|---|
| **706** | **Propagules bird dispersed** | **y** |
| | **Source(s)** | **Notes** |
| | Costion, C.M., & Plunkett, G.M. (2016) A revision of the genus Osmoxylon (Araliaceae) in Palau, including two new species. PhytoKeys 58: 49–64 | [Description of other Osmoxylon species] "To date, there have been no published accounts reporting observations on pollination or fruit/seed dispersal in Osmoxylon. Locals in Palau report that the Micronesian starling, Alponis opaca orii, frequently feeds on the fruits, but these observations do not detail effective pollination nor specify whether the feeding is on the sterile baccate pseudo-fruits or the fertile fruits. We suggest that birds are involved in both pollination (enticed by the pseudo-fruits) and seed dispersal (through the fertile fruits), but observations are needed to record nectar feeding and visits to Osmoxylon inflorescences to feed on the fruits and pseudo-fruits by birds or other potential pollinators." |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Presumably Yes] "Dispersal in the family takes place generally by fruit-fall; but as fruits are baccate or (more usually) drupaceous, they will also be eaten by birds (for the most part) and bats" ... [Family description] "Fruits on stiff" radiating pedicels, ovoid or spherical, fleshy, ribbed when dry." ... "the ripe fruit shining purple or blue-black." [Species description] |

| 707 | **Propagules dispersed by other animals (externally)** | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | "Fruits on stiff" radiating pedicels, ovoid or spherical, fleshy, ribbed when dry." [Probably No. Fruits/seeds lack means of external attachment, although small size may enable them to get stuck in mud on hooves or feet, or on fur] |

| 708 | **Propagules survive passage through the gut** | **y** |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Presumably Yes] "Seed germination is most likely after the seed having passed the gut of a bird or after mastication of the fruit by a bat." [Family description] |

| 801 | **Prolific seed production (>1000/m2)** | |
|---|---|---|
| | **Source(s)** | **Notes** |

| Qsn # | Question | Answer |
|---|---|---|
| | Steenis, C.G.G.J. van (ed.). 1979. Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 9. Martinus Nijhoff / Dr. W. Junk Publishers, The Hague | [Unknown] "Inflorescence terminal, a large compound umbel, bowl-shaped, up to 35 cm ; peduncle up to 10 cm, stout, with lanceolate caducous bracts (c. 4 cm long) below and among the numerous (c. 50-70) primary rays primary rays c. 12-15 cm long at anthesis, c. 3 mm 0, bearing two caducous bracts (1 cm long) at the apex, each ray ending in three branches; central branch c. 2 cm long, bearing an umbel of c. 20-40, sterile, bacciform flowers (c. 6 mm when dry) on pedicels c. 10 mm, and 2-6-celled; the two lateral branches c. 4—6 cm, with two opposite or subopposite bracts about the middle, terminating in a subspherical umbel 2^2-3 cm of 30-50 flowers on pedicels c. 8-10 mm long. Calyx rim obsolete, undulate. Petals with irregular erect lobes, tubular below. Stamens 6-10 exserted. Ovary turbinate somewhat angled; glabrous, 6-14-celled; disk flat with a central double row of pustulate stigmas. Fruits on stiff" radiating pedicels, ovoid or spherical, fleshy, ribbed when dry." |

| 802 | **Evidence that a persistent propagule bank is formed (>1 yr)** | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Royal Botanic Gardens Kew. (2016) Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/. [Accessed ] | Unknown. No storage information available |

| 803 | **Well controlled by herbicides** | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown. No information on herbicide efficacy of chemical control of this species |

| 804 | **Tolerates, or benefits from, mutilation, cultivation, or fire** | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | Tropiclimber Cultivation information. (2009). Growing your Osmoxylon lineare. http://www.members.westnet.com.au/wackos/PDFs/Growing%20your%20osmoxylon%20plant.pdf. [Accessed 19 May 2016] | [Unknown. Related species tolerates some pruning] "Osmoxylon lineare is a small shrub with graceful linear leaves and a dense habit. The flowers are fairly boring, I even clip them off as the fruits are not that attractive either. Ideally it should be kept cut back to no more than a metre, this keeps the foliage nice and compact. It is a good idea to tip prune your growing plant from a young age to form a good framework of branches." |

| 805 | **Effective natural enemies present locally (e.g. introduced biocontrol agents)** | |
|---|---|---|
| | **Source(s)** | **Notes** |
| | WRA Specialist. 2016. Personal Communication | Unknown |

**Summary of Risk Traits:**

High Risk / Undesirable Traits
• Elevation range exceeds 1000 m, demonstrating some environmental versatility
• Grows in tropical climates
• Reproduces by seeds
• Seeds likely dispersed by birds & intentionally by people
• Limited ecological information reduces accuracy of risk prediction

Low Risk Traits
• No reports of invasiveness or naturalization, but no evidence of widespread introduction outside native range
• Unarmed (no spines, thorns or burrs)
• Ornamental uses

Second Screening Results for Tree/tree-like shrubs

(A) Shade tolerant or known to form dense stands?> Unknown
(B) Bird-dispersed?> Yes. Fleshy-fruited & presumably dispersed by birds
(C) Life cycle <4 years? Unknown
Outcome = Evaluate Further