

**Family:** *Phyllanthaceae*

**Taxon:** *Baccaurea ramiflora*

**Synonym:** *Baccaurea sapida* (Roxb.) Müll. Arg.  
*Pierardia sapida* Roxb.

**Common Name:** Burmese grape

Questionnaire Status:	current 20090513 Assessor Approved	Assessor:	Chuck Chimera	Designation:	L
Status:		Data Entry Person:	Chuck Chimera	WRA Score	0
101	Is the species highly domesticated?		y=-3, n=0		n
102	Has the species become naturalized where grown?		y=1, n=-1		
103	Does the species have weedy races?		y=1, n=-1		
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		n
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		y=1, n=0		n
403	Parasitic		y=1, n=0		n
404	Unpalatable to grazing animals		y=1, n=-1		
405	Toxic to animals		y=1, n=0		
406	Host for recognized pests and pathogens		y=1, n=0		
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
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0		y
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		y=1, n=0		y
411	Climbing or smothering growth habit		y=1, n=0		n

412	Forms dense thickets	y=1, n=0	n
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	
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	n
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	>3
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
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	
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m <sup>2</sup> )	y=1, n=-1	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	n
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: L

WRA Score 0

**Supporting Data:**

101	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Is the species highly domesticated?? No] No evidence
102	2011. WRA Specialist. Personal Communication.	NA
103	2011. WRA Specialist. Personal Communication.	NA
201	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Species suited to tropical or subtropical climate(s) 2-high] "Distribution : Burma (Myanmar), South China, India (Assam, Andaman and Nicobar Islands), Malaysian Peninsula, Vietnam, Laos (Khammouan and many other provinces )."
202	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Quality of climate match data? 2-high] "Distribution : Burma (Myanmar), South China, India (Assam, Andaman and Nicobar Islands), Malaysian Peninsula, Vietnam, Laos (Khammouan and many other provinces )."
203	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Broad climate suitability (environmental versatility)? Yes. Potentially] "In primary rain forest 50 - 1700 m. altitude..." [Elevation range exceeds 1000 m; demonstrating potential environmental versatility]
204	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Distribution : Burma (Myanmar), South China, India (Assam, Andaman and Nicobar Islands), Malaysian Peninsula, Vietnam, Laos (Khammouan and many other provinces )."
205	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Does the species have a history of repeated introductions outside its natural range? No] "...native to the South-east Asian region, and is found wild and is cultivated in Nepal, India, Myanmar, South China, Indochina, Thailand, the Andaman Islands and peninsular Malaysia." [Not widely distributed outside native range]
301	2005. Wagner, W.L./Herbst, D.R./Lorence, D.H.. Flora of the Hawaiian Islands website. Smithsonian Institution, Washington, D.C. <a href="http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/index.htm">http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/index.htm</a>	[Naturalized beyond native range? No] No evidence from the Hawaiian Islands
301	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Naturalized beyond native range? No] No evidence
302	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Garden/amenity/disturbance weed? No] No evidence
303	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Agricultural/forestry/horticultural weed? No] No evidence
304	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Environmental weed? No] No evidence
305	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Congeneric weed? No] No evidence

401	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Produces spines, thorns or burrs? No] "Evergreen trees with sympodial branching. Leaves simple, alternate and spiral. Petiole swollen at base and top. Flowers unisexual cauliflorous. Fruit fleshy, orange to purple."
402	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Allelopathic? No] "More often it is cultivated in home gardens and intercropped with other tropical fruits like durian, rambutan and mango." [No evidence, and any indication of allelopathic properties would likely discourage its use with other plants]
403	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Parasitic? No] "Evergreen trees with sympodial branching." [Euphorbiaceae or Phyllanthaceae. No evidence]
404	2005. Suksri, S./Premcharoen, S./Thawatphan, C./Sangthongprow, S.. Ethnobotany in Bung Khong Long Non-Hunting Area, Northeast Thailand. Kasetsart Journal (Natural Science). 39(3): 519-533.	[Unpalatable to grazing animals? Unknown] "Table 3 Ethnobotanical plants in Bung Khong Long Non-Hunting Area used by the villagers....Young leaves as fresh vegetables (Mar- Apr); Wood for constructions" [Leaves palatable for human consumption, so possibly palatable to grazing animals]
404	2011. WRA Specialist. Personal Communication.	[Unpalatable to grazing animals? Unknown]
405	2011. WRA Specialist. Personal Communication.	[Toxic to animals? Unknown] No evidence of toxicity to humans, but unknown for animals
406	2011. WRA Specialist. Personal Communication.	[Host for recognized pests and pathogens? Unknown]
407	2007. Peter, K.V. (e.d.). Underutilized and underexploited horticultural crops, Volume 2. New India Publishing, New Delhi, India	[Causes allergies or is otherwise toxic to humans? No] "Fruit is highly nutritive and a very rich source of vitamin C and protein. Iron contents are also very high. A delicious juice is prepared from the fruit. Seeds are used against vomiting and asthmatic trouble. Every part of the plant is equally useful in the antidotal treatment of snakebite or a scorpion sting." [No evidence of toxicity, but medicinal uses may indicate potential for overdoses]
407	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Causes allergies or is otherwise toxic to humans? No] "The fruit is harvested and used locally, eaten as a fruit, stewed or made into wine; it is also used medicinally to treat skin diseases. The bark, roots and wood are harvested for medicinal uses, and as a brown-red dye."
407	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Causes allergies or is otherwise toxic to humans? No] "The edible fruit is peeled and has a sweet to sour taste. The fruit is high in fibre and vitamin C... The fruit is also used in stews, salted for storage and to make wine. The bark, root and wood have medicinal uses. The bark, roots and wood are dried and ground before boiling in water. Fruit are used medicinally to treat skin diseases." [No evidence of toxicity, accidental or otherwise, despite use as food and medicine]
408	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Creates a fire hazard in natural ecosystems? No] "In primary rain forest 50 - 1700 m. altitude, becoming common understory tree of fire-free forests..." [No evidence]
409	2001. Apel, U.. Forest Types and Tree Species in Xishuangbanna. TianZi Biodiversity Research & Development Centre, Xishuangbanna, Yunnan, China <a href="http://www.natureproducts.net/Ecology/Apel1.html">http://www.natureproducts.net/Ecology/Apel1.html</a>	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Ecology: Main under-storey tree in TEF, growing together with <i>Pseudouvaria indochinensis</i> , <i>Pittosporopsis kerrii</i> , <i>Ficus langkokensis</i> , shade-demanding, prefers dryer areas in the TEF at altitudes from 500 – 1000 m." [Understorey tree likely to tolerate shade]
409	2005. Baker, P.J./Bunyavejchewin, S./Oliver, C.D./Ashton, P.S.. Disturbance history and historical stand dynamics of a seasonal tropical forest in western Thailand. Ecological Monographs. 75(3): 317–343.	[Is a shade tolerant plant at some stage of its life cycle? Yes] "...straight-boled, large-crowned <i>Hopea</i> overtop a predictable assemblage of shade-tolerant canopy species such as <i>Saccopetalum</i> and <i>Garcinia</i> , which overtop extremely shade-tolerant understory species such as <i>Baccaurea</i> , <i>Dimocarpus</i> , and <i>Phoebe</i> ."
410	2007. Peter, K.V. (e.d.). Underutilized and underexploited horticultural crops, Volume 2. New India Publishing, New Delhi, India	[Tolerates a wide range of soil conditions? Yes] "The tree adapts to a wide range of soil and climatic conditions."

410	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Tolerates a wide range of soil conditions? Yes] "Growth occurs on a wide range of soils."
411	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Climbing or smothering growth habit? No] "Small evergreen tree of more than 10 m. high, branches sympodially developed."
412	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Forms dense thickets? No] "The tree is found at low density and has poor regeneration."
501	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Aquatic? No] "In primary rain forest 50 - 1700 m. altitude..." [Terrestrial]
502	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Grass? No] Euphorbiaceae or Phyllanthaceae
503	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Nitrogen fixing woody plant? No] Euphorbiaceae or Phyllanthaceae
504	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Evergreen trees with sympodial branching. Leaves simple, alternate and spiral. Petiole swollen at base and top."
601	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Evidence of substantial reproductive failure in native habitat? Possibly] "The tree is found at low density and has poor regeneration. Use by local populations has led to overexploitation." [Reproductive failure in native range due to human factors. May change within introduced range]
602	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Produces viable seed? Yes] "Seeds : 2-4 large seeds surrounded by a juicy translucent or pinkish pulp."
603	2011. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]
604	2008. Bingtao, L. et al.. Flora of China - Euphorbiaceae. Missouri Botanical Garden & Harvard University Herbaria, <a href="http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf">http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf</a>	[Self-compatible or apomictic? No] "Trees or shrubs, dioecious"
604	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Self-compatible or apomictic? No] "Flowers small grouped in raceme, axillary to cauliflorous, males and females on different trees. Males smaller arranged in slender clusters of 10 cm. long, mostly at the end of the branches, individual flower with short pedicel. Female slightly bigger, racemes clustered of 30 cm. long on old branches and main trunk." [No evidence. Trees dioecious]
605	1994. Zomlefer, W.B.. Guide to Flowering Plant Families. The University of North Carolina Press, Chapel Hill & London	[Requires specialist pollinators? No] "Most euphorbs easily attract pollinators (mostly flies)..." [Family description. Flower structure of <i>Baccaurea ramiflora</i> not highly specialized & likely pollinated by insects]

605	2008. Bingtao, L. et al.. Flora of China - Euphorbiaceae. Missouri Botanical Garden & Harvard University Herbaria, <a href="http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf">http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf</a>	[Requires specialist pollinators? No] "Flowers small, dioecious, apetalous, many flowered, compound into raceme like panicles. Male inflorescences densely papillose, often fascicled on branchlets as well as on trunk, to 15 cm; bracts ovate-lanceolate, 2–3 mm, chestnut yellowish, puberulent outside. Male flowers: sepals 4 or 5, oblong, 5–6 mm, puberulent outside; stamens 4–8; pistillode terete, bipartite. Female inflorescences to 35 cm; bracts as in male. Female flowers: sepals 4–6, oblonglanceolate, ca. 6 mm, puberulent outside; ovary ovoid or globose, 3-celled, densely ferruginous hispid; styles very short, ca. 0.5 mm; stigma depressed, bifid at apex." [Flowers not highly specialized]
606	2011. Trade Winds Fruit. Mafai - <i>Baccaurea ramiflora</i> . <a href="http://www.tradewindsfruit.com/mafai.htm">http://www.tradewindsfruit.com/mafai.htm</a>	[Reproduction by vegetative fragmentation? No] "The seeds germinate readily. The tree can also be propagated by air layering, budding and grafting." [No evidence]
607	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Minimum generative time (years)? 4+] "This spreading evergreen tree has a thin bark and grows to 25 m...This slow-growing tree occurs in humid evergreen forest and in disturbed margins..." [Slow growing tree probably takes 4+ years to reach reproductive maturity]
701	2008. Bingtao, L. et al.. Flora of China - Euphorbiaceae. Missouri Botanical Garden & Harvard University Herbaria, <a href="http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf">http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf</a>	[Propagules likely to be dispersed unintentionally? No. Unlikely] "Capsules baccate, ovoid or subglobose, 2–2.5 × 1.5–2 cm, red yellow to purple when mature, indehiscent, or 3-valved when dry; arils white. Seeds flat-elliptic or rotund, 1–1.3 cm." [Fruits & seeds with no means of external attachment & relatively large]
702	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Propagules dispersed intentionally by people? Yes] "The fruit is harvested and used locally, eaten as a fruit, stewed or made into wine; it is also used medicinally to treat skin diseases. The bark, roots and wood are harvested for medicinal uses, and as a brown-red dye."
702	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Propagules dispersed intentionally by people? Yes] "Burmese grape is found throughout Asia and is most commonly cultivated in India and Malaysia. This minor fruit is used and sold locally. More often it is cultivated in home gardens and intercropped with other tropical fruits like durian, rambutan and mango."
703	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Propagules likely to disperse as a produce contaminant? No. Unlikely] "Capsules baccate, ovoid or subglobose, 2–2.5 × 1.5–2 cm, red yellow to purple when mature, indehiscent, or 3-valved when dry; arils white. Seeds flat-elliptic or rotund, 1–1.3 cm." [Relatively large fruit & seeds unlikely to inadvertently contaminate produce if grown with other crops]
704	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Propagules adapted to wind dispersal? No] "Fruits : The fruit is a berry of 2.5 – 3.5 cm. in diameter, ovoid or ellipsoid, hanging along old branches and main trunk, pale orange ripening reddish to purplish."
705	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Propagules water dispersed? Possibly] "This slow-growing tree occurs in humid evergreen forest and in disturbed margins often near streams." [Distribution near streams suggest seeds may be water dispersed]
706	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Propagules bird dispersed? Yes] "The fruit is a berry of 2.5 – 3.5 cm. in diameter, ovoid or ellipsoid, hanging along old branches and main trunk, pale orange ripening reddish to purplish." [Fleshy-fruited & adapted for bird and other vertebrate frugivory]
707	2008. Bingtao, L. et al.. Flora of China - Euphorbiaceae. Missouri Botanical Garden & Harvard University Herbaria, <a href="http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf">http://flora.huh.harvard.edu/china/mss/volume11/Euphorbiaceae.pdf</a>	[Propagules dispersed by other animals (externally)? No. Unlikely] "Capsules baccate, ovoid or subglobose, 2–2.5 × 1.5–2 cm, red yellow to purple when mature, indehiscent, or 3-valved when dry; arils white. Seeds flat-elliptic or rotund, 1–1.3 cm." [Fruits & seeds with no means of external attachment & relatively large]
708	2008. Biodiversity Informatics & co-Operation in Taxonomy for Interactive shared Knowledge bas (BIOTIK). Species list for Laos - <i>Baccaurea ramiflora</i> . <a href="http://www.biotik.org/laos/species/b/bacra/bacra_en.html">http://www.biotik.org/laos/species/b/bacra/bacra_en.html</a>	[Propagules survive passage through the gut? Yes] "The fruit is a berry of 2.5 – 3.5 cm. in diameter, ovoid or ellipsoid, hanging along old branches and main trunk, pale orange ripening reddish to purplish." [Fleshy-fruited, and presumably adapted for ingestion and internal dispersal by frugivores]

708	2008. Datta1, A./Rawat, G.S.. Dispersal modes and spatial patterns of tree species in a tropical forest in Arunachal Pradesh, northeast India. <i>Tropical Conservation Science</i> . 1(3): 163-185.	[Propagules survive passage through the gut? Yes] "Appendix 1. List of identified tree species, fruit type and color, dispersal mode, major consumers and tree density (trees per ha). A total of 158 tree species are listed, of which 128 were represented in 21 vegetation plots and classified based on dispersal mode, 30 additional species were not recorded in sample plots, but observed to be consumed by animals." [Baccaurea ramiflora - Known consumers and/or dispersers - Deer, wild pigs, primates]
801	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Prolific seed production (>1000/m2)? Unknown] "This spreading evergreen tree has a thin bark and grows to 25 m." [Possible that larger trees may be able to achieve high seed densities]
802	2011. WRA Specialist. Personal Communication.	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown]
803	2011. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species
804	2009. Cochrane, M.A.. Tropical Fire Ecology: Climate Change, Land Use and Ecosystem Dynamics. Springer, Berlin, Heidelberg, New York	[Tolerates, or benefits from, mutilation, cultivation, or fire? No] "Fire-induced aboveground mortality was highly correlated with size class in all transects and forest types...Among the six transects, eight tree species had 25 or more individuals, permitting species-specific analyses of size-dependent mortality from the fires. Of these, four species had either sufficiently low (e.g., Shorea siamensis) or high mortality (e.g., Polyalthia viridis, Baccaurea ramiflora, Helicteres sp.)..." [Does not tolerate fires]
805	2011. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]