

Rediscovery of *Lysimachia venosa* (Wawra) H. St. John on Kaua‘i, Hawaiian Islands¹

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Primulaceae

Lysimachia venosa (Wawra) H. St. John **Rediscovery**

The elusive *Lysimachia venosa* was originally discovered by Heinrich W Wawra in 1870 around the summit of Mt. Wai‘ale‘ale, Kaua‘i, and was not observed again until 1911 when Joseph Rock also made a collection around Mt. Wai‘ale‘ale (Wagner *et al.* 1990; Marr & Bohm 1997; Wood 2012). Although no living plants of this taxon had been documented since Rock’s 1911 observation, a small dried branch representing *L. venosa* was found after a severe storm in 1991 at the base of a 1000 m tall cliff below Wai‘ale‘ale in a region called ‘the blue hole’. This fragment still left botanists with no indication as to where any living populations might occur, or if in fact any living individuals survived the storm (Marr & Bohm 1997; Wood 2012). During a 2012 U.S. Fish and Wildlife Service funded survey, and 101 years after any living plants had been documented, ca. 30 plants of *L. venosa* were rediscovered on Kaua‘i’s windward slopes just below the summit peak of Kawaikini. The region of rediscovery is known for its very steep, wet, and windy conditions making access and biotic surveys difficult. The habitat can be described as a *Dubautia-Sadleria* shrubland/fermland plant community associated with plants of *Psychotria mariniana*, *Kadua affinis*, *Melicope clusiifolia*, *M. waialealae*, *Vaccinium calycinum*, *Coprosma kauaense*, *Dubautia laxa*, *D. paleata*, *D. imbricata* subsp. *acronaea*, *Machaerina angustifolia*, *Sadleria cyatheoides*, *Sadleria pallida*, and *Sphenomeris chinensis*. Threats to the region include pigs, rats, goats, slugs, and non-native plant taxa such as *Clidemia hirta*, *Rubus rosifolius*, *Axonopus fissifolius*, *Juncus planifolius*, *Cyperus meyenianus*, *Paspalum conjugatum*, *Psidium cattleianum*, *Melastoma candidum*, *Rhodomyrtus tomentosa*, *Sphaeropteris cooperi*, and *Sacciolepis indica*. There are near future plans to monitor and gather seed and cutting collections of *L. venosa* for *ex situ* conservation and to conduct further vascular plant surveys around adjacent slopes where there is very high potential for additional individuals.

Material examined. **KAUA‘I:** Summit of Mt. Wai‘ale‘ale, 1600 m elev, Mar 1870, *Wawra 2165* (holotype, W; isotypes, W, BISH); Summit of Mt. Wai‘ale‘ale, 1911, *Rock 8881* (BISH, GH); Wailua headwaters, north fork, Blue Hole, small branch found after storm at bottom of 1000 m tall cliff, 600 m elev, 7 May 1991, *Wood 784* (PTBG); Summit Ridge just south of Kawaikini, shrub, up to 1 m tall, stems yellow-brown or yellow-orange, ca. 7 branched at base, upper stems with few branching, leaves light green, corolla burgundy, 50 deg. NE aspect, steep slope below ascending ridge to Kawaikini, terrain difficult and steep, ca 30 plants in general area, 1180 m elev, 11 Jan 2012, *Wood 14845* (BISH, PTBG, US).

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Lysimachia venosa (Wawra) H. St. John from ridge below Kawaikini; *Wood* 14845

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