

*NYMPHAEA AMPLA* (NYMPHAEACEAE), A WATERLILY NEW TO FLORIDA

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*Nymphaea ampla* (Salisb.) DC., a species of waterlily previously unknown for Florida and the southeastern United States is here reported from Lee County, southwestern Florida. This species is wide spread in tropical and subtropical America, ranging from Mexico, south through Central America to central Brazil and throughout the Antilles. It is reported by Conard (1905) to reach its northernmost station in southern Texas (Kinney County: Fort Clark and Spofford). Small (1931) also lists it from Texas. However, Correll and Johnston (1970) do not list it for the Texas flora.

The species has been in the Fort Myers area of Florida as early as 1976 (as evidenced by photographs of "*Nymphaea* sp." on file at the Lee County Hyacinth Control District taken September 14, 1976 by Ernest Del Fosse formerly of that agency). Specimens were first collected May 17, 1979 by the junior author and subsequently identified as *N. ampla* by the senior author. Since then, collections have been made at four additional sites.

*Nymphaea ampla* belongs to subgenus *Brachyceras* which consists of about 12 species. Of these, *N. capensis*, *N. elegans*, and *N. X daubeniana* (a hybrid derived in part from *N. micrantha*) are also found in Florida outside of cultivation. *Nymphaea elegans* is the only indigenous species of the subgenus in Florida; the other two are escapes from cultivation and naturalized.

*Nymphaea ampla* resembles *N. capensis*, a cultivated African species locally escaped in Indian River and Seminole counties, in being the only other species in Florida with distinctive sinuate-dentate leaves. However, *N. ampla* differs in having white flowers while *N. capensis* has blue to lavender flowers. *Nymphaea ampla* also resembles *N. odorata*, another day-blooming species with large white flowers, but differs in having emergent flowers and sinuate-dentate leaves. *Nymphaea odorata* has nonemergent flowers and entire leaves.

Although *N. ampla* var. *speciosa* (Mart. & Zucc.) Casp. and var. *pulchella* (DC.) Casp. are cultivated, the typical form of *N. ampla* apparently is not. Our plants appear to belong to the typical wild form and not the ones in cultivation.

*Nymphaea ampla* is well established in Lee County and has also

been observed in the Everglades National Park (Collier County). It is unknown how long *N. ampla* has been a member of the Florida flora. Because of its rather restricted known distribution, it is possibly a relatively recent adventive likely to have been brought in by migratory waterfowl. Because of its wide distribution in the American tropics and subtropics, its presence in Florida is not totally unexpected. Since it is such a spectacular plant, it is unlikely that it would have gone unnoticed for long. On the other hand, the fact that it has been overlooked by botanists until recently is not totally unlikely as the now well known *N. elegans* was not discovered until 1929 (Small, 1931). Also, *N. blanda* was not discovered until 1940 and its true identity was not known until several years later (Ward, 1977). *Nymphaea jamesoniana* was not discovered in Florida until 1967 (Ward, 1977). This points out the fact that the waterlilies are still poorly known in Florida in spite of the work on Conard (1905), Small (1931, 1933), Ward (1977, 1977a), and others.

Seeds of *N. ampla* collected by the junior author from the Florida populations in 1979 have proven to be viable through simple germination tests. The species is known to be very aggressive in nature and to be highly salt tolerant (J. Beckner, pers. comm.) which suggests that it has the potential to remain or even to become a more frequent element of the southern Florida flora.

*NYMPHAEA AMPLA* (Salisb.) DC., Syst. 2: 54. 1821; *non* Kotschy ex Casp., 1866.

*Castalia ampla* Salisb., Parad. Lond. 1, t. 14. 1806.

*Nymphaea lotus* Aubl., Pl. Guian. Fr. 1: 533. 1775; *non* L., 1753.

*Nymphaea candolleana* Lehm., Ham. Gartenz. 9: 203. 1853.

*Nymphaea ampla* var. *plumieri* Planch., Ann. Sci. Nat. ser. 3, 19: 44. 1853.

Leaves 15-45 cm in diameter, suborbicular, narrowly peltate, sinuate-dentate, upper surface green, flecked with purple spots, lower surface purple, flecked with purple-black spots, veins prominent. Flowers diurnal, white, emergent, 4-7 cm in diameter; sepals 4, oblong-lanceolate, obtuse to acute, outer surface green, marked with distinct short black lines; petals 12-21, oblong-lanceolate, obtuse; stamens 90-190, outermost longer than innermost, anthers apiculate; carpels 14-23, styles short-conical, gradually narrowed to apiculate tip, stigma extending out in short rays. Seeds subglobose to elliptic, ca. 1 mm long, with longitudinal rows of hairs.

SPECIMENS EXAMINED: FLORIDA: Lee Co.: Roadside drainage canal, ca. 3.5 mi. ESE of Fort Myers, T44S, R25E, S26, NE 1/4, May 17, 1979, Les 3 (\*), 4 (\*), June 19, 1979, Les & Cassani s.n. (USF); First canal N of FLA 78 on Del Prado, T44S, R24E, S6, SE

\* Specimens on deposit at Lee County Hyacinth Control District offices.



1/4, October 5, 1979, *Les 143* (USF); Shallow water of roadside ditch, Neal Road, T44S, R26E, S7, NW 1/4, November 13, 1979, *Les 153* (USF); Standing water of roadside ditch, Alt. 41, 0.3 mi. N of FLA 78, T43S, R24E, S35, S 1/2, November 14, 1979 *Les 157* (USF); Eastwood Country Club, shallow pond in golf course, T44S, R25E, S28, SE 1/4, November 11, 1979, *Les 160* (USF).

## LITERATURE CITED

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