



SPREAD OF NYMPHOIDES PELTATUM IN LAKE MESSINA

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In October, 1935, I noticed growing in a small protected estuary of the newly created Messina lake in the wooded park west of Bristow, several leaves of what appeared to be dwarfed specimens of the Water Lily, *Nymphaea advena*. They were too far from shore to be collected and feeling satisfied they were *Nymphaea* that had been introduced I gave no further consideration to their appearance.

During the same month of 1936, while on a field trip, I was surprised to find the surface of the same estuary about half covered with the leaves of this plant. They were flowering abundantly. I collected several and upon examination found them to be entirely new to Creek county. After a close examination and consulting several publications I was fully convinced that the supposed *Nymphaea* was not a *Nymphaea* at all but a *Gentianaceae*, *Nymphoides peltatum* (S. P. Gmel.) Brit & Rend. In at-

tempting to check the distribution of this plant within the state, I am unable to find any record of its having been previously collected.

By October, 1937, it had completely covered the entire estuary and spread some little distance upshore to the north. It was, also, well established for a distance of 100 yards in the shallow waters along the shore across the lake opposite the mouth of the estuary. Two species of this *Nymphoides* are found along our eastern seaboard where *N. peltatum* has been introduced from Europe.

I have tried to determine how it was introduced but without convincing results. The park attendant told me that he believed it was planted there with other water plants to provide a spawning ground for fish but had no idea from where the plant had been obtained. Another version is that it was introduced when the lake was stocked with fish but no one seems to know from where. A third possibility is that it may have been introduced by water fowls since the seed are light, small and thin, the margins well supplied with hooked hairs. How it arrived will, probably, always be a matter of conjecture but that it is there and well established is certain.

