

WOLFFIELLA GLADIATA  
(J.D. Smith) C.H. Thompson  
Wolffiella

FAMILY: Lemnaceae.

SYNONYM: *Wolffiella floridiana* (Hegelm.) Hegelm.

HABIT: Floating aquatic herb, 6-8 mm.; flowers and fruit obscure.

SIMILAR SPECIES: Members of the genus *Wolffiella* are among the world's smallest angiosperms. They are distinguished from *Wolffia* and other related duckweeds by obscure technical characters, best observed under a binocular microscope.

TOTAL RANGE: FL to TX and Mex., n. locally to MA, WI, and MO.

STATE RANGE: There are post-1980 records from Ashtabula, Geauga, Portage, Summit and Wayne counties. Pre-1960 records exist from 3 additional counties: Fairfield, Licking and Perry.

HABITAT: Restricted to wholly stagnant bodies of water, usually in boggy areas protected from wave action, with an abundant accumulation of organic debris, and with acid water ranging from pH 4.7-6.8 (Hicks, 1937).

HAZARDS: Drainage, pollution, or other alteration of the aquatic habitat. This species is especially sensitive to water level fluctuations.

RECOVERY POTENTIAL: Unknown. Possibly poor due to reproduction difficulties (see Comments).

INVENTORY GUIDELINES: Specimens should be collected with some water in a container and examined under a binocular microscope while still fresh. Dried material then should be stored in a packet in a manner similar to bryophytes.

COMMENTS: Flowers and fruits in *Wolffiella* are apparently extremely rare. Hicks (1932, 1937) states that none had ever been observed. However, Harrison and Beal (1964) state that they did find one specimen in flower. Thus, reproduction is almost entirely restricted to the vegetative method.

It is very possible that *Wolffiella gladiata* is more widespread in Ohio than current records indicate. It is difficult to identify, and could easily be overlooked due to the difficulty of collecting it in its aquatic habitat. It should be sought in areas of the appropriate habitat throughout the state. Hartman and English (1959) report it from Pymatuning Reservoir in western Pennsylvania. Thus, it should be sought intensively on the Ohio side of that body of water.

A recent revision (Landolt, 1980) treats this species as *W. gladiata*, and this treatment is followed by Kartesz and Kartesz (1980) and Hellquist and Crow (1982).

SELECTED REFERENCES:

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