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GOLDENCREEPER (*Thladiantha dubia*): **A new, non-native invasive plant discovered in Connecticut**

Goldencreeper aka Manchu tubergourd (*Thladiantha dubia* Bunge) is a member of the melon/gourd (*Cucurbitaceae*) family. It is a new non-native, invasive plant which has recently been discovered in Kent, CT in 2021. Goldencreeper is a dicotyledonous trailing or climbing vine that can grow 2 m or longer. Stems are slender, lightly pubescent, and climb in a twining manner over other plants by means of tendrils. Leaves are broadly heart-shaped, up to 10-cm long and 9-cm wide, with a deep, rounded, U-shaped base, smooth margins, and rough-hairy on both surfaces. Flowers are showy, bright yellow, 15 to 25-mm across, and typically bloom from June through September. The fruits are oblong-ovate or oval, 4 to 5-cm long, red or reddish, longitudinally bearded, soft, with sweet pulp. Each fruit contains multiple dark brown seeds that resemble watermelon seeds. Goldencreeper is a dioecious plant with male and female flowers borne on separate plants. Therefore, it can produce viable seeds only when both male and female plants are present. Goldencreeper is an entomophilous plant. It requires a specific pollinator, a tiny wild bee of the genus *Ctenoplectra*. Interestingly, bumblebees and wasps responsible for pollinating cucumbers, melons, and pumpkins usually do not visit goldencreeper flowers (Kuluev et al., 2019).



Fig. 1. Goldencreeper location in Kent, CT and reporting crew left, Robin Zitter and right, Nikolle Lizana.



Fig. 2. A goldencreeper vine.



Fig. 3. A golden creeper tuber.

North American Distribution

Golden creeper is native to Northeastern China, Korea, and Russia. It is believed to have been introduced into North America as an ornamental plant. Currently, it is present in Illinois, Massachusetts, Minnesota, New Hampshire, New York, and Wisconsin states in the United States and in Manitoba, Ontario, and Quebec provinces in Canada. This is the first report in Connecticut.

Habitat and Spread

Golden creeper has frequently been reported to invade vacant lots, waste lands, roadsides, and vegetable gardens as it often escapes ornamental cultivation. It reproduces and spread mainly by persistent, fleshy, underground, potato-like tubers which make it extremely difficult to eradicate. It also reproduces by seed. Unfortunately, many online plant and seed vendors are selling golden creeper seeds for ornamental purposes.

Management

Currently, there is limited research on chemical and non-chemical methods for controlling golden creeper. On a small scale, golden creeper can be managed mechanically by digging out the underground tubers. In preliminary research trials, the Washington County Conservation District has reported

complete kill of underground tubers with foliar applications of glyphosate and triclopyr.

Early Detection and Reporting

Connecticut residents are encouraged to help the Connecticut Agricultural Experiment Station (CAES) and the Connecticut Invasive plant Working Group (CIPWG) in early detection of golden creeper. Please report golden creeper presence in Connecticut to the CAES via email at Jatinder.Aulakh@ct.gov or call 1-860-683-4984. You may also report using the EDDMaps web-based mapping system for documenting invasive species.

References

1. Kuluev B. R., D. Yu Shvets, Ya M. Golovanov, N. S. Probatova. (2019). *Thladiantha dubia* (Cucurbitaceae) in the Republic of Bashkortostan as a Dangerous Weed with High Invasive Potential. Russian Journal of Biological Invasions 10(2):160-170
2. Ontario Ministry of Agriculture, Food, and Rural Affairs. (n.d.). Ontario Weeds: Golden creeper. <http://www.omafra.gov.on.ca/english/crops/facts/ontweeds/goldencreeper.htm>
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