

## NOTES

**First Report of Oak Mistletoe [*Phoradendron leucarpum* (Raf.) Reveal & M.C. Johnston] on the Invasive Liana, Oriental Bittersweet (*Celastrus orbiculatus* Thunb.).**—On 26–27 January 2009, a severe ice storm affected large parts of east-central Kentucky and brought down numerous trees. While removing a large, ice-felled wild black cherry (*Prunus serotina* Ehrh.) from a residential yard in an older part of Berea, the first author cut a large tangle of Oriental bittersweet (*Celastrus orbiculatus* Thunb.) out of the upper limbs. A portion of the liana (woody vine) had unusual swollen cankers of 1.2–2.0 cm in diameter. Several of the cankers had green shoots 4.0–8.0 mm long (largest at 1.5 cm) with opposite leaves 3.0–7.0 mm growing out of it. Closer examination of these shoots revealed the presence of oak mistletoe [*Phoradendron leucarpum* (Raf.) Reveal & M.C. Johnston, Viscaceae]. Lianas were 8.0–9.0 mm in diameter above and below the haustorial swellings. The crown of the wild black cherry had heavy infestations with 25–35 clumps of oak mistletoe. Several other trees in the neighborhood, e.g., black walnut (*Juglans nigra* L.), silver maple (*Acer saccharinum* L.), and American elm (*Ulmus americana* L.) also had heavy infestations of mistletoe (see Thompson et al. 2008).

The base of the Oriental bittersweet liana was over 9.0 cm in diameter, which indicated it was several years old. The wild black cherry at 7.0 m from the root collar was aged at 70 years. It is speculated that the close proximity of the liana to infested branches of the black cherry provided the opportunity for viscid mistletoe fruits and seeds to fall and adhere to the vine by action of birds, i.e., bill wiping or defecation and/or gravity. The long association of the liana with the cherry tree gave ample opportunity for deposition of fruits and seeds on the woody vine. Mistletoe shoots on the bittersweet were chlorotic (yellowish-green) compared with the dark green shoots on the black cherry. Several swollen cankers did

not yet have shoots protruding and some mistletoe shoots were broken off in the felling and handling of the tree.

In Berea, oak mistletoe has been reported from other non-native species including Bradford pear (*Pyrus calleryana* Decne.), Siberian elm (*Ulmus pumila* L.), Lavalley's hawthorn (*Crataegus* × *lavalleyi* Herincq. ex Lavalley), and Amur honeysuckle [*Lonicera maackii* (Rupr.) Herder] by Thompson et al. (2008). Examination of Kuijt (2003) and an extensive literature review did not reveal oak mistletoe associated with any exotic vines as hosts.

Our report documents the first North American occurrence of *Phoradendron leucarpum* on *Celastrus orbiculatus* and the first record of oak mistletoe hemiparasitism on a non-native liana for the continental United States. The voucher specimen is deposited at Berea College Herbarium (BEREA). Kentucky: Madison County: Berea, in the back yard of 410 Center Street, hemiparasitic on *Celastrus orbiculatus* liana in the top of a 20 m tall *Prunus serotina* felled by the ice storm of 26–27 January 2009. Wild black cherry had heavy infestation of ca. 25–35 clumps. Base of Oriental bittersweet was 9.0 cm in diameter; 6 March 2009, David D. Taylor 18752 (BEREA).

LITERATURE CITED. Kuijt, J. 2003. Monograph of *Phoradendron* (Viscaceae). Systematic Botany Monographs 66:1–643. Thompson, R. L., K. Rivers Thompson, E. A. Fleming, R. D. Cooks, J. R. Price, M. N. Naseman, and A. J. Oles. 2008. Eastern mistletoe (*Phoradendron leucarpum*, Viscaceae) in the city of Berea, Kentucky: a high incidence of infestation and eight new host species for Kentucky. Journal of the Kentucky Academy of Science 69:2–10.—David D. Taylor, USDA Forest Service, 1700 Bypass Road, Winchester, KY 40391 and Ralph L. Thompson, Berea College Herbarium, Biology Department, Berea College, Berea, KY 40404. Corresponding author emails: dtaylor02@fs.fed.us; ralph\_thompson@berea.edu.



Taylor, David D. and Thompson, Ralph L. 2009. "First Report of Oak Mistletoe [Phoradendron leucarpum (Raf.) Reveal & M.C. Johnston] on the Invasive Liana, Oriental Bittersweet (Celastrus orbiculatus Thunb.)." *Journal of the Kentucky Academy of Science* 70(1), 97–97.  
<https://doi.org/10.3101/1098-7096-70.1.97>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/175714>

**DOI:** <https://doi.org/10.3101/1098-7096-70.1.97>

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