

Two Vascular Plants New to Nova Scotia: Yellow Glandweed (*Parentucellia viscosa* (L.) Caruel) and Whorled Loosestrife (*Lysimachia quadrifolia* L.)

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Yellow Glandweed (*Parentucellia viscosa* (L.) Caruel), found near Yarmouth, and Whorled Loosestrife (*Lysimachia quadrifolia* L.), found near Halifax, are reported as new to Nova Scotia. The former is also new to the Atlantic coast of North America.

Key Words: Yellow Glandweed, *Parentucellia viscosa*, Whorled Loosestrife, *Lysimachia quadrifolia*, new record, Nova Scotia, Maritime Provinces.

Yellow Glandweed (*Parentucellia viscosa* (L.) Caruel), also known as Yellow Gumweed and as Red Bartsia, is an herbaceous, hemiparasitic annual in the family Scrophulariaceae (USDA, 2010a*). It is native to Mediterranean and western regions of Europe, usually occurring in coastal habitats, and has been introduced as an alien species to various countries. It is now known to occur in Australia, Canada (British Columbia), Chile, New Zealand, and the United States (Arkansas, California, Hawaii, Louisiana, Mississippi, Oklahoma, Oregon, Texas, and Washington). With opposite toothed and pinnately veined leaves, *Parentucellia* is reminiscent of *Rhinanthus*, but is glandular hairy and without inflated calyces. We report this species for the first time from the Atlantic Coast of North America, having discovered one small population near Cape Forchu, Yarmouth County, Nova Scotia (43.81728N; -66.14847W; 16 July 2010, *MacDonald and Freedman*, NSPM, photos DAO and Atlantic Conservation Data Centre). It was first observed in flat roadside habitat within about 20 m of the ocean on the northwest side of Route 304, occurring in open rocky cobble in a weedy community between a fishing shack and piles of stored lobster traps. Listed in order of decreasing abundance, the most prominent associated plants were *Trifolium aureum*, *Plantago maritima*, *Festuca rubra*, *Agrostis stolonifera*, *Ligusticum scoticum*, *Ambrosia artemisiifolia*, and *Odontites vernus* ssp. *serotinus*. We searched other potential habitat in the vicinity, both north and south of the population over several km along Route 304, but found no others. There were about 300 individual plants in the discovered population, mostly occurring in an area of about 40 m², with a few local outliers of as much as 10 m. The source of this adventive population of *P. viscosa* is not known, but the species is not grown as an ornamental and so was likely introduced accidentally.

Whorled loosestrife (*Lysimachia quadrifolia* L.) is a perennial forb in the family Primulaceae. It is native

to and widely distributed in eastern North America (Cholewa 2009; USDA 2010b), being known from 26 states as well as New Brunswick (Hines 2000), Ontario, and Quebec. We report this plant for the first time from Nova Scotia, from two locations: (a) Point Pleasant Park, Halifax, Halifax County (44.63°N; -63.57°W, 10 June 2010, *MacDonald and Freedman*, NSPM, photos DAO and Atlantic Conservation Data Centre); and (b) along the north side of Highway 103, west of exit 5, Halifax County (44.71°N; -63.91°W, 10 July 2010, *MacDonald and Freedman*, NSPM, photo DAO and Atlantic Conservation Data Centre). The Point Pleasant population was in an open well-drained trail edge in shrubby habitat dominated by *Diervilla lonicera*, with about 25 stems of *L. quadrifolia* present. The Highway 103 population was in a mesic habitat fringing a wetland beside Little Indian Lake, in an open, gently sloping roadside with mixed gravel and humus amid various herbs and low shrubs, with 200–400 stems of *L. quadrifolia* occurring in an area of about 5 m x 4 m. It seems likely that these adventive populations established by seed carried in mud by vehicles from established populations elsewhere in eastern North America. The nearest of the few New Brunswick occurrences (Hines 2000) are approximately 200 km NNW of the new Nova Scotia localities.

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Sean Blaney of the Atlantic Canada Conservation Center (ACCCDC) confirmed that these species were not previously known from Nova Scotia. Paul Catling of the National Herbarium, Agriculture Canada, Ottawa, commented on a draft of the manuscript. Specimens of both species have been deposited with the Nova Scotia Museum of Natural History, and colour images and copies of the specimen labels were sent to the ACCDC and the National Herbarium.

Documents Cited (marked * in text)

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