

FIRST REPORT OF *SAGINA APETALA* (CARYOPHYLLACEAE) FOR NEW YORK

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ABSTRACT

Sagina apetala is documented from New York State for the first time. It was found in Central Park, New York Co., New York. The occurrence is documented with herbarium specimens and a DNA sample. A key to the *Sagina* species of New York State is provided.

Sagina apetala Ard. is native to Europe and has been documented in North America from British Columbia, California, Oregon, Washington, Kansas, Illinois, Louisiana, Maryland and New Jersey (Crow 1978, 2005). The *Sagina* species of New York State were revised by Mitchell and Tucker (1991). They did not report *Sagina apetala*. The species is not reported in the Catalogue of the Vascular Plants of New York State (Werier 2017) or the USDA Plants database for New York (USDA, NRCS 2018).

Voucher specimens, *Sagina apetala*. USA. New York. New York Co.: New York City. Central Park, Bethesda Terrace, between 72nd and 73rd Streets and between 5th and 6th Avenues, 40.774505N, 73.970649W (WGS84, ± 25 m), ca 17 m elev, 26 Apr 2017, *Atha 15923* (NHA, NY).

Sagina specimens from Central Park were collected while conducting a botanical inventory of the Park in collaboration with the Central Park Conservancy and the New York City Department of Parks and Recreation. We also collected *Sagina japonica* and *Sagina procumbens* in Central Park. These two, non-indigenous species are common in full sun in hard packed soils in the joints of paving stones and around the foundations of walls and buildings. *Sagina decumbens* is endangered in New York state and is only known from Queens and Suffolk counties (Werier 2017).

Key to *Sagina* species of New York State

1. Flowers principally 4-merous; sepals 4, divergent in fruit; petals 4 or absent; stamens 4(–8).
 2. Leaf base margins long-ciliate; pedicels glandular-pubescent; petals absent or minute ***Sagina apetala***
 2. Leaf base margins glabrous or with minute glandular cilia; pedicels always glabrous; petals equal to or shorter than the sepals ***Sagina procumbens***
1. Flowers principally 5-merous; sepals 5, erect in fruit; petals 5; stamens 5 or 10.
 3. Plants often purple-tinged; pedicels and sepals glabrous or sparsely glandular-pubescent, sepal-tips often purple; capsule sutures $\geq 1/2$ capsule length; seeds with dorsal groove ***Sagina decumbens***
 3. Plants green; pedicels densely glandular-pubescent, the sepal tips green or white; capsule sutures $1/4$ capsule length; seeds without dorsal groove ***Sagina japonica***

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