Polygonum cuspidatum

(Japanese knotweed
Mexican bamboo
Fleece flower)

Common Name(s) | Full Scientific Name | Family Name Common |
--- | --- | ---
Mexican bamboo | | 
Fleece flower | | 

FAMILY NAME COMMON

Knotweed family

FAMILY SCIENTIFIC NAME

Polygonaceae

IMAGES

Incursion
Inflorescence close-up
Roadside Incursion
NOMENCLATURE/SYNONYMS

Synonyms: Fallopia japonica (Houtt.) Dcne.
Pleuropterus cuspidatus (Sieb. & Zucc.) Moldenke
Pleuropterus zuccarinii (Small) Small
Polygonum zuccarinii Small
Reynoutria japonica Houtt.

DESCRIPTION

Botanical Glossary

Polygonum cuspidatum is an herbaceous perennial that appears woody, and reaches 1-3 m (3-10 ft.) in height. The round stems are hollow and covered with scales. The shoots grow from spreading rhizomes that can reach 20 m (65 ft.) in length. The leaves are broadly oblong-ovate or ovate-lanceolate, 8-15 cm (3-6 in.) long and 5-12 cm (2-4.75 in.) wide. The tips of the leaves are abruptly acuminate, while the bases of the leaves are truncate. The lower leaf surface lacks the minute trichomes that other similar species possess (see below).

The numerous, greenish-white flowers of Polygonum cuspidatum are borne in panicles from the upper axils. These panicles measure 8-15 cm (3-6 in.) long. The flowers are functionally unisexual: each of the male and female flowers still have the complementary organs, but they are vestigial. The inflorescences of the male flowers tend to be upright, while those of the female flowers tend to be drooping. Flowers appear from August to September. The fruit are papery and winged, and are 6-10 mm (0.25-0.4 in.) long. These fruits contain black, smooth, shiny, 3-angled achenes that are 3-4 mm (0.2 in.) long. When frost hits this plant, it quickly turns brown and dies back for the year.

Page References Bailey 348, Fernald 589, Gleason & Cronquist 139, Holmgren 124, Magee & Ahles 441, Newcomb 190. See reference
section below for full citations.

**SIMILAR SPECIES**

*Polygonum sachalinense* F. Schmidt ex Maxim. (giant knotweed)

*Polygonum x bohemica* (hybrid of *P. cuspidatum* and *P. sachalinense*)

These three species can look very similar to each other. The most reliable character for distinguishing them is the type of hair on the veins of the leaf undersides, which can be seen with the aid of a strong hand lens.

<table>
<thead>
<tr>
<th>Character</th>
<th>Polygonum cuspidatum</th>
<th>Polygonum sachalinense</th>
<th>Polygonum x bohemica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf size</td>
<td>&lt; 18 cm long</td>
<td>Often &gt; 30 cm long</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Leaf base</td>
<td>Truncate</td>
<td>Deeply cordate</td>
<td>Cordate to truncate</td>
</tr>
<tr>
<td>Hairs on veins of leaf underside (need 15-20x hand lens)</td>
<td>Blunt, broad-based knobs</td>
<td>Narrow-based, long, multicellular hairs</td>
<td>Broad-based stout single-celled hairs</td>
</tr>
</tbody>
</table>

**REPRODUCTIVE/DISPERSAL MECHANISMS**

Though *Polygonum cuspidatum* produces winged fruits that can move some distance, it spreads mostly through long rhizomes. Rhizome fragments can sprout new plants, and the plant often disperses via natural or human-aided movement of such fragments.

**DISTRIBUTION**

*Polygonum cuspidatum* is native to China, Japan and Korea. In the United States it is found from Maine to Georgia and west from South Dakota to Oklahoma. In the western part of the country it is in Washington, Oregon, California, Idaho, Montana, Utah, Colorado and Alaska. This plant has been reported from all the states of New England.

**HISTORY OF INTRODUCTION IN NEW ENGLAND**

*Polygonum cuspidatum* was introduced from Japan to the United Kingdom probably sometime after 1830. It was first distributed around 1855 by the Royal Botanical Gardens at Kew. From here it was popularized through garden catalogs. By the early 1900's, the rampant nature of its growth was observed, and the plant began to decline in popularity.
This plant was most likely brought into the United States from Britain close to the turn of the century for use as a horticultural plant. By 1894, it was reported as naturalized near Philadelphia, Pennsylvania, Schenectady, New York and Atlantic Highlands, New Jersey. Regardless of these early observations of naturalization, in 1910, it was being described in garden catalogs in this country. By 1938, information was already being published on how to get rid of the plant in gardens.

As in other parts of the country, *Polygonum cuspidatum* was brought into New England for ornamental gardens. From the gardens it likely spread via rhizomes as well as some of the few viable seeds.

**HABITATS IN NEW ENGLAND**

- Abandoned Field
- Early Successional Forest
- Edge
- Floodplain Forest
- Forest Wetland
- Herbaceous Wetland
- Open Disturbed Area
- Roadside
- Shrub Wetland
- Vacant Lot
- Wet Meadow
- Yard or Garden

*Polygonum cuspidatum* can be found in a variety of habitats. It thrives in riparian areas and wetlands, but can be found along roadides and other disturbed areas. It prefers full sunlight, but can tolerate moderate shade. This plant is tolerant of high temperatures, dry soil and salt. It is extremely intolerant of frost, and after the first frost, it turns brown and dies back for the season.

**THREATS**

The threat of *Polygonum cuspidatum* was first recognized in Britain, where it has been present for a longer period of time. It appears to behave similarly here, forming dense, persistent thickets that exclude other vegetation. Its vegetative reproduction has proved quite successful. Established populations are difficult to eradicate.

**MANAGEMENT LINKS**

- The Nature Conservancy
- Plant Conservation Alliance
- Fact sheet with control information

- The Connecticut Invasive Plant Working Group
- Invasive Plant Management Guide
DOCUMENTATION NEEDS

Documentation required: A photograph of the leaves.
Best time for documentation: Summer, fall.

ADDITIONAL INFORMATION

Green County (NY) Soil & Water Conservation District
Information on research and control projects on Batavia Kill

Adirondack Park Invasive Plant Program
Identification, fact sheet, management and distribution information

Integrated Taxonomic Information System
Taxonomic information

PLANTS Database
General information and map

The Nature Conservancy
Extensive description, photographs and control information

Plant Conservation Alliance
Fact sheet including control information

Maine Natural Areas Program
Fact sheet with descriptive information

Virginia Native Plant Society
General information including control

Ohio Perennial and Biennial Weed Guide
Photographs and description

Invasivespecies.gov
Links to more information

REFERENCES


Holmgren, N.H. 1998. Illustrated Companion to Gleason and


DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
- Export as comma-delimited text file

Submit Selection

MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

- The whole New England area
- One or more states
- One or more counties
- One or more towns (county sub-divisions)

Submit Selection