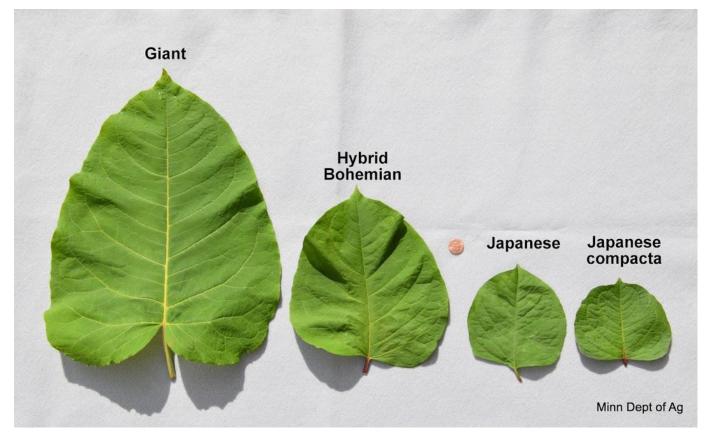


Kinds of knotweeds & Pesky Plant Trackers

Four kinds to be aware of:

In Minnesota, common knotweeds include Bohemian, Japanese, and Japanese var. *compacta* (also called "dwarf knotweed"). Giant knotweed is rare in this region. All four plants are Noxious Weeds on Minnesota's "Prohibited Control" list. Pesky Plants staff can advise you on how to collect data, no matter what kind of knotweed you observe.



Japanese var. *compacta* (far right) is a cultivated type of Japanese knotweed. Bohemian knotweeds are hybrids between Giant and Japanese knotweeds. Bohemian knotweed traits are strongly variable. They can appear intermediate between the two parent species, or they may closely resemble one or the other species. Sometimes even experts have difficulty telling apart knotweeds.

If I track a knotweed for Pesky Plant Trackers, do I need to know what kind it is?

Yes. Knowing what type of plant you observe is important for analyzing data and interpreting results. However, because it is tricky to tell apart the four kinds, not every identification will be perfect. Do your best. Prioritize tracking phenology data above perfect identification.

Can I collect data even when I'm not sure what kind of knotweed I'm looking at?

Yes. This is common and it is not an obstacle. Use paper datasheets to collect data rather than waiting. This is important because there is no way to capture phenology data that were not recorded. The process for observing knotweed plants does not differ from one kind to another. Also see https://www.usanpn.org/nn/faq#species_unknown and page 3 of this resource.

Stepwise key

Follow these steps to make a likely identification. Do your best. Imperfect identification is not an obstacle to participation. Measurements in Steps 5 and 6 are generally helpful but will not apply to every case. Over the growing season, stay alert to *all* traits in this key. You may see new features that cause you to revise your identification. (If so, see bottom of page 3.)

Step 1: Is the plant reported on EDDMapS? Or did a professional help you find or identify it?Yes: Use the identification given by EDDMapS or a professional.No: If there are open flowers, go to Step 2. If not, go to Step 4. (When flowers open, revisit Step 2.)

Step 2: Are the flowers pink?

Yes: Probably Japanese var. *compacta* (i.e., dwarf knotweed.) Go to step 3 for more evidence. **No:** Go to Step 3.

Yes: The plant is *i* probably Bohemi

Step 3: Do open flowers have conspicuous stamens?

Yes: The plant is *not* Japanese. Because giant is rare in Minnesota, the plant is probably Bohemian. (Be aware of giant knotweed because detection is important.) Go to Step 4 for supporting evidence.

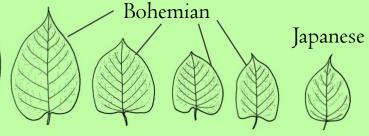
No. The plant could be either Japanese (including var. *compacta*) or Bohemian. Go to Step 4.

Step 4: Attempt to classify leaf shape.

Giant

Heart-shape, lacking flat bases, often a range of shapes: Likely Bohemian. Keep in mind that Bohemian leaf morphology is not consistently in the *middle* of Japanese and giant. Rather, it covers a

> continuum from Japanese-like to giant-like. If some leaves clearly lack flat base, this is evidence against Japanese. Giant is rare in MN. Go to Steps 5 and 6 for more evidence.



Roundish shieldshape, often crinkly or reddish edges (not pictured): Probably Japanese var. *compacta*. Go to Steps 5 and 6 for more evidence.

Shield-shape, flat base: Likely Japanese knotweed (non-dwarf). Go to Steps 5 and 6 for further evidence.

Line drawings by C Roché, adapted from p6 Wilson, 2007

Step 5: Length of largest mature leaf, from base to tip:

<4 inches: Likely Japanese var. *compacta* 4–8 inches: Likely Japanese >8 inches: Likely Bohemian >1 foot: Might be giant Step 6: Plant height at peak growing season: <3 feet: Likely Japanese var. *compacta* 3–10 feet: Likely Japanese (non-dwarf) >10 feet: Likely Bohemian, might be giant

Conflicting evidence? Email for assistance.

What do I need to do to observe knotweed for Pesky Plant Trackers?

Upload photos to your Observation Deck or to iNaturalist*

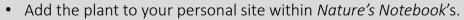


Photo: Elizabeth Heeren

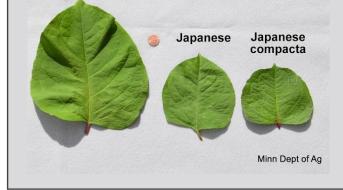
Hybrid Bohemian Photograph knotweed plant(s) you track and upload images to your Observation Deck and/or iNaturalist. Try to capture the details of individual flowers. When photographing leaves, include a familiar object for scale. Your photos create a visual document that researchers can refer to later. Photos on iNaturalist invite a larger community to help identify knotweeds.

*iNaturalist is an online social network of people sharing biodiversity information.

Use Nature's Notebook for Japanese and Bohemian knotweeds.



- Collect data using either the mobile app or the website.
- If you prefer paper datasheets, key in your data online.



Special instructions for var. compacta (i.e., dwarf variety): Go to your Observation Deck (from a computer, not the app). Within your Observation Deck, when you create or edit the plant, use the plant's comment field to indicate that it is var. compacta.

Use paper datasheets for giant knotweed.



- At this time, giant knotweed is not listed in USA-NPN's database. For this reason, you cannot add this kind of plant to a personal site within your Observation Deck.
- However, you can observe giant knotweed and observations are valuable.
- Email peskyplants@umn.edu about your find (which is rare in Minnesota) and request paper datasheets.
- Send completed datasheets to Pesky Plants Staff. Do so by emailing photos or scans. Alternatively, email staff to request a physical mailing address.

What if I think a knotweed is one kind, but find out later it's a different kind?

If you need to change the identification of a plant mid-season, please communicate this to Pesky Plants staff (peskyplants@umn.edu) so we can respond to this information.