THE PURDUE LANDSCAPE REPORT

Asian jumping worms: ID, impact, and prevention

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Jumping worms (a.k.a. snake worms, crazy worms, *Amynthas spp.*)

While you're gardening in the coming weeks keep your eyes peeled for jumping, wriggling worms. Asian jumping worms are spreading in the Midwest and they can do serious damage to your yard.

Where are they from?

No one is sure exactly how jumping worms were introduced into North America but it's likely that they were brought over from Asia in soil used for potted plants, landscaping material, or agricultural material.

What do they do?

These worms are hungry and reproduce quickly! Unlike most other earthworms which prefer lower layers of soil, jumping worms prefer the top layer where organic material needed for plant growth is concentrated. They quickly eat the organic matter in the topsoil which makes it difficult for plants to grow and other soil animals to survive. In forests this change can greatly reduce the number of plants in the understory and in gardens or other maintained landscapes it can make it difficult to keep plants alive.



Sign of jumping worms: "Coffee ground" soil
Grainy
Grainy
Little loose organic matter
Small slightly compact pieces (worm castings)
Photo credit: Purdue Plant and Pest Diagnostic Laboratory

What do they look like?



Uninvaded soil
 Higher ratio of organic matter to "sand"
 Loose organic matter
 No or few small compact pieces
 Photo credit: Maria Barnes

Jumping worms get their name from their distinctive behavior. As a defense against predators they thrash wildly and twist their

bodies when touched. Jumping worms are shiny, slightly iridescent, and grey-brown rather than the duller red-brown seen in other earthworms. They have large bodies (4-8 in) with a milkywhite ring around them. Even if you don't see one of these worms you might notice signs of their presence. Soil in heavily invaded areas takes on a distinctive grainy, coffee ground-like consistency.





Jumping worm (Amynthas agrestis)

Thrash and twitch

- Shiny, slightly iridescent, and grey-brown
- Milky-white ring (clitellum)
- Mostly dry

Photo credit: Purdue Plant and Pest Diagnostic Laboratory

Common earthworm (Lumbricus terrestris)

Wiggle gently
Dull red-brown
Red-ish ring (clitellum)
Slimy

Photo credit: Joseph Berger, Bugwood.org

How do they spread?

Jumping worms are usually spread through the movement of soil, compost, and mulch as well as for fishing bait and for vermiculture. They can also be spread in dirt trapped in tractors and other machinery. Worms may be transported as adults or as small cocoons so it is easy to miss them.

What can you do?

Unfortunately, there is currently no good way to eradicate them. However, you can minimize their spread on your property and to other areas. Following these tips will reduce the chance of spreading jumping worms and their cocoons!

- Check any plants, soil, or compost you buy for worms before you use it.
- If possible, remove the soil from any plants you buy for your landscape and throw it away in a sealed plastic bag.
- If you have jumping worms on your property, avoid moving organic matter (like compost and soil) from invaded areas to new areas or running machinery through invaded areas.

- If you find any jumping worms, put them in a sealed bag and throw them in the trash. Do not put them back in your yard or compost pile.
- Clean dirt off any machinery before you move it to a new area.
- If you buy worms for fishing or vermiculture make sure they're not jumping worms (*Amynthas spp.*).
- Don't dump fishing bait or vermiculture worms on the ground when you're done with them. Put them in a sealed container or bag and throw them in the trash.

If you think you've seen this worm or any other invasive species, report it! Follow the steps we recommend on reportINvasive.com:

- The GLEDN Phone App
- EDDMaps
- 1-866 NO EXOTIC (1-866-663-9684)
- depp@dnr.IN.gov

Resources

Video of a jumping worm Illinois Jumping Worm Fact Sheet Wisconsin DNR Jumping Worm Page Cornell Extension Jumping Worm Page

Image credit: Tina Reynolds on flickr

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