

Asian Jumping Worms or Amynthis Worms: The Next Nightmare

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Asian Jumping worms are our latest soil threat here in Maine. I would rather be writing about daylilies. According to our state plant and forestry department head, Gary Fish, these newly found worms are in 13 out of 16 counties in Maine. Gary also stated "Our wet season had perfect conditions for the worms to multiply. <https://www.maine.gov/dacf/php/horticulture/jumpingworms.shtml>

These worms are illegal to use in any composting business and illegal to use as bait in the state of Maine. Amynthis worms are a type of earthworm native to East Asia. They are smaller than European night crawlers, reproduce rapidly, are much more active, and have a more voracious appetite. This rapid life cycle and ability to reproduce asexually gives them a competitive edge over native organisms, and even over night crawlers. When disturbed, Amynthis worms jump and thrash about, behaving like a threatened snake wiggling and dropping their tails when picked up.

The Asian worms were brought to my attention by a local customer whose daylily bed was over-run with these worms. I read up on them and these worms have been in my county (Hancock) since 2018. I checked my compost pile and I have them there. I'm finding them every day now while planting my day-

lily seedlings out in the field and I also found them in another field while digging potatoes. These worms eat all the humus and leave black gravel. They are surface feeders and are in the top six inches of the soil.

Wisconsin was where an internet search took my inquiry about these invasive worms which look very much like our own night crawlers except for the white band/collar which goes completely around on the Asian worms and only partially on our native worms. I first wrote to the daylily round robin about the Asian worms asking if any one else on the robin had been plagued by these worm monsters? Ginny Pearce replied back, writing "I was warned about them at a Wisconsin regional daylily meeting. Following the gathering, daylily clumps I purchased were removed from the grower's display bed, packed into heavy plastic, and transported home where I then tore the clumps apart and washed them thoroughly in large containers to make absolutely sure none of the little (actually not little at all) monsters were going into my soil. It worked. So far

they have not found their way into my gardens." Mel Campbell replied that she found an article about the jumping worms at a Cornell cooperative extension service. <https://warren.cce.cornell.edu/gardening-landscape/warren-county/master-gardener-articles/invasive-asian-jumping-earthworms>. Cornell University wrote this about the worms and with good news about them for garden-



Amynthis Worms

ers in the north. “Asian jumping worms are an annual species; the adults die after the first freeze. But the cocoons, which are about the size of a mustard seed, will survive the winter and hatch when temperatures reach 50°F for a consistent period. One worm can produce many cocoons without mating. Because they are more aggressive and their populations can grow faster than the common European species, they may out-compete existing worm populations. Cocoons are very small and dirt-colored, so they are nearly impossible to spot with your own eyes. Cocoons can be spread easily in potted plants, on landscaping equipment, mulch, tire treads, and even hiking boots.” Monique Warnke of Windsor, WI, replied that “The University of Wisconsin has done some testing. Tea seed meal works. Apply in the spring and fall.” As reported by Wisconsin agriculture dept: “In the sugar maple and hard wood groves the Asian worms pose a real threat, eating all the leaf matter leaving a gravel-like soil that erodes



and is useless nutritionally to the trees causing their imminent death. Erosion of the soil lends to the trees becoming uprooted and falling over.”

I found a few other methods of reducing populations of them in your gardens at the Cornell uni-

versity web site. Check your property for jumping earthworms using a mustard pour (it won't harm your plants!). Mix a gallon of water with 1/3 cup of ground yellow mustard seed and pour slowly into the soil. This will drive any worms to the surface where you can easily remove them. Cocoons are sensitive to heat and can be destroyed with clear plastic solarization; in late spring or summer, Cover moistened soil with a sheet of transparent polyethylene for two - three weeks or until the soil temper-

ature exceeds 104°F for at least three days. I found 18 Asian worms while planting (10) rows of daylilies (8) plants to a row and when digging a 20 foot row of potatoes yesterday. I tossed them into a five gallon pail and disposed of them in my outdoor wood furnace. If the worms are left in the pail over night, they can escape by climbing out of the pail. Yes, they can climb straight out of a slick plastic walled pail at least two foot high. They extrude a sticky fluid which enables them to climb out of the pail. You can drown them by putting an inch of water in the bottom of the pail which also dilutes the sticky fluid so they can not climb out. The state of Wisconsin recommends putting them in a plastic bag and then into the trash.

Due to our history of glaciation, there are no native earthworms in Maine. Non-native earthworms from Europe (such as night crawlers) have become well established here through early colonial trading. Though they are beneficial to our gardens, earthworms can have destructive effects on our forests. Amyntas worms are known and sold for bait and composting under a variety of names including snake worms, Alabama jumper, jumping worms, Asian Amyntas worm. They are in the genus Amyntas, and distinguishing between the several species in the genus can be difficult. All species in this genus are considered invasive in Maine. It is illegal to import them into Maine (or to propagate or possess them) without a wildlife importation permit from the Maine Department of Inland Fisheries and Wildlife (MDIFW). Amyntas worms are native to Korea and Japan, and are now found in the United States from Maine to South Carolina and west to Wisconsin. Amyntas worms were first collected from a Maine greenhouse in 1899, though an established population of this active and damaging pest was not discovered here until about 2014 when two populations were discovered in Augusta (one at the Viles Arboretum) and two populations were found in Portland. They have also been found in a rhododendron display at the Coastal Maine Botanical Gardens in Boothbay. <https://www.maine.gov/dacf/php/horticulture/jumpingworms.shtml>