

**Introduction:** Jumping worm (*Amyntas agrestis*) was first detected in a nursery in Napa County in 2021, in the environment in Sonoma County in 2023, and since been found in Humboldt County.

**Distribution:** This worm is native to eastern Asia and is now widespread in Canada and USA, being reported from 25 states (CDFA).

**Description:** Jumping worms are generally dark red-dish with a pale clitellum that is not raised above the remaining segments. Adults can sometimes be recognized with dissection of internal structures (Chang *et al.* 2016), but usually DNA sequencing is needed to confirm identification. *Amyntas agrestis* belongs to the family Megascolecidae, which includes hundreds of species that are native to the Eastern Hemisphere. Numerous species in this family are already present in California without being serious pests, some for over 150 years. While it is impossible to confirm *A. agrestis* without dissection or DNA, *Amyntas* and its relatives can be identified by examining the setae on each segment. In Megascolecidae, numerous setae are evenly arranged around the entire body (see the white bumps in figure below), while most native earthworms have fewer, paired setae on the underside of the body.

**Biology:** Jumping worm breeds quickly and produces cocoons at the soil surface. Adults develop within about two months. These worms can reproduce asexually, by parthenogenesis (CDFA).

**Economic importance:** True to their name, these worms wriggle vigorously and can even jump. They are more voracious and quickly growing than most native earthworm species. They typically live near the surface of soil and can rapidly deplete leaf litter and reduce the amount of beneficial microorganisms in soils. They can also outcompete native worm species, potentially leading to local extinctions. These worms are easily distributed by people in soil and potted plants. They are difficult to detect and even more difficult to diagnose. There is a high probability that they are more widely spread in California than is currently known.

### References:

[CDFA] California Pest Rating Proposal for *Amyntas agrestis* (Goto & Hatai): Jumping worm. Available: <https://blogs.cdfa.ca.gov/Section3162/wp-content/uploads/2023/08/Amyntas-agrestis.pdf> (November 2025)

Chang, C.H., Snyder, B.A. and Szlavecz, K. 2016. Asian pheretimoid earthworms in North America north of Mexico: an illustrated key to the genera *Amyntas*, *Metaphire*, *Pithemera*, and *Polypheretima* (Clitellata: Megascolecidae). *Zootaxa* 4179:495-529.



Jumping worm in preservative



Jumping worm mouth and anterior segments