**Effects of an invasive slug on native ant-plant seed disperser mutualisms**

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In eastern North America up to 30% of herbaceous plant species in forests are specially adapted with ant-dispersed seeds (myrmecochory). In myrmecochorous systems plants offer ants an ant-attractant food reward (elaiosomes) in exchange for seed dispersal. However, ants may not be the only organisms attracted to the elaiosomes; here I show that the invasive slug, *Arion subfuscus*, eats the ant-attractant food reward, reducing the attractiveness of the seeds to ants preventing them from dispersing the seeds. Through seed removal/predation experiments and video monitoring I offered seeds of Canadian wild ginger (*Asarum canadense*) to forest communities, allowing access to different combinations of ants, slugs, and rodents to assess the effect of each group on seed fate. Ants visiting the seed depots were the primary seed dispersers, while slugs consumed only the elaiosomes. Lab trials confirmed that elaiosome consumption by slugs prevents ants from dispersing the seeds; thus possibly removing a valuable food supply for the ants and preventing new seedlings from establishing. Disruption of native seed dispersal mutualisms by invasive slugs has potential large negative consequences for ants, myrmecochorous plants, and the forest community as a whole.