

ABSTRACT: In circumstances where populations of invasive species occur across variable landscapes, interactions among invaders, their parasites, and the surrounding environment may establish local coevolutionary trajectories for the participants. This can generate variable infection patterns when parasites interact with sympatric versus allopatric hosts. Identifying the potential for such patterns within an invasive-species framework is important for better predicting local infection outcomes and their subsequent impacts on the surrounding native community. To begin addressing this question, we exposed an invasive snail (*Bithynia tentaculata*) from two widely separated sites across the USA (Wisconsin and Montana) to the digenean parasite, *Sphaeridiotrema pseudoglobulus*, collected from Wisconsin. Parasite exposures generated high infection prevalences in both sympatric and allopatric snails. Furthermore, host survival, host growth, the proportion of patent snails, and the timing of patency did not differ between sympatric and allopatric combinations. Moreover, passaging parasites through snails of different origins had no effect on transmission success to subsequent hosts in the life cycle. However, the number of parasites emerging from snails and the pattern of their release varied based on snail origin. These latter observations suggest the potential for local adaptation in this system, but subsequent research is required to further substantiate this as a key factor underlying infection patterns in the association between *S. pseudoglobulus* and *B. tentaculata*.