1046-92-505

Horst R. Thieme* (thieme@math.asu.edu), Department of Mathematics and Statistics, Arizona State University, Tempe, AZ 85287-1804, and Thanate Dhirasakdanon. The persistence of ranavirus in salamanders with ephemeral larval habitats. Preliminary report.

Salamander larvae in Arizona are only present during parts of the year, while terrestrial (adult) salamanders typical are too dispersed to allow frequent disease transmission. We test by a mathematical model the intraspecific reservoir hypothesis (Brunner et al., 2004) that ranavirus persists in Arizona salamander populations through yearly reintroduction of the virus into larval population by breeding adults.

Reference

Brunner, J.L., D.M. Schock, E.W. Davidson, J.P. Collins, Intraspecific reservoirs: complex life history and the persistence of a lethal ranavirus, Ecology 85 (2004), 560-566 (Received September 05, 2008)