

## Differences in resting-site preference in two coexisting land snails on alpine slopes

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Resting-site preference and patterns of spatial distribution were examined in the sympatric land snails *Arianta arbustorum* (L., 1758) and *A. chamaeleon* (L. Pfeiffer, 1842) on two opposite slopes in the southeastern Alps, Austria. The two slopes did not differ in proportion of *A. arbustorum* and *A. chamaeleon* (74.4% vs. 25.6% on the NNE-exposed slope and 68.3% vs. 31.7% on the SSW-exposed slope). Individuals of both species showed aggregated dispersion patterns. The nearest-neighbour method indicated that in both species snail aggregations predominantly consisted either of *A. arbustorum* or *A.*

*chamaeleon* on the NNE-exposed slope with a mosaic of rocks and distinct patches of different plants. On the SSW-exposed slope, which was less variable in vegetation cover, snail aggregations consisted of conspecific and heterospecific individuals. Juvenile and adult *A. arbustorum* preferred to rest attached to leaves of *Adenostyles alliariae*, but avoided rock surfaces and patches of grass on the NNE-exposed slope. In contrast, juvenile and adult *A. chamaeleon* preferentially rested on rock surfaces, and also avoided grass patches. Juvenile and adult *A. chamaeleon* did not differ in resting-site preference, whereas small differences in resting sites were observed between juvenile and adult *A. arbustorum*. Differences in resting-site preference is one way of niche differentiation which may allow individuals of the two *Arianta* species to coexist.

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