

## **Picky learning: understanding the specific conditions under which the kleptoparasitic spider *Argyrodes antipodius* learns**

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In animals with a limited number of neurons, learning is heavily constrained. Such animals will most likely demonstrate learning when it is most advantageous, such as when variation between generations is large but variation within generations is low. *Argyrodes antipodius* is a kleptoparasite that steals food from other, larger spiders and will opportunistically attack spiderlings. As *A. antipodius* can exploit a number of host species, *A. antipodius* needs to adjust its stealing behaviour to the idiosyncrasies of each host species in order to be successful. Previous work has shown that *A. antipodius* is capable of learning, as males can learn to be winners and losers in competition for females. This study tested whether *A. antipodius* was able also to learn to modify its foraging behaviours. The results showed that *A. antipodius* was able to modify its foraging behaviours, but that males seemed more apt at learning than females. These results are discussed with respect to behavioural plasticity within the sub-family *Argyrodiinae*, and in the more general context of learning in invertebrates.

