

Kin recognition in the largely solitary bee, *Manuelia postica* (Apidae: Xylocopinae)

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The recognition of conspecifics is a central issue to social behaviour. In eusocial hymenopterans, kin recognition has been clearly demonstrated. *Manuelia postica* is a largely solitary bee species in which larvae develop inside individual cells within a nest and remain isolated from conspecifics until the destruction of partitions by adults. Nestmate recognition in *M. postica* has been previously demonstrated under experimental conditions. Isolation between individuals during development and nestmate recognition ability in adult females make *M. postica* an ideal species for testing the occurrence of kin recognition capacity in females. Kin recognition was demonstrated through cross-fostering field experiments involving the single transfer of recently enclosed larvae, and subsequent laboratory recognition bioassays with emerging females. Results suggest kin recognition occurs through self-referent phenotype matching. Given the basal position of *Manuelia* in the phylogeny of the Apidae, kin