

Pollen foraging in colonies of *Melipona bicolor* (Apidae, Meliponini): effects of season, colony size and queen number

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ABSTRACT. We evaluated the ratio between the number of pollen foragers and the total number of bees entering colonies of *Melipona bicolor*, a facultative polygynous species of stingless bees. The variables considered in our analysis were: seasonality, colony size and the number of physogastric queens in each colony. The pollen forager ratios varied significantly between seasons; the ratio was higher in winter than in summer. However, colony size and number of queens per colony had no significant effect. We conclude that seasonal differences in pollen harvest are related to the production of sexuals and to the number of individuals and their body size.

Key words: *Melipona bicolor*; Stingless bees; Pollen foragers; Colony size; Queen numbers; Seasonality