

Invasive Alien Species Yellow Crazy Ant- Hemipterans Mutualism and Assessment of Unicoloniality

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Abstract: The present study dealt with the report of the mutualistic relationship between the yellow crazy ants *Anoplolepis gracilipes* and three groups of the order Hemiptera: plant hopper *Leptocentrus taurus* Fabricius, 1775 of the family Membracidae, scale insects *Lecanium* sp. of the family Coccoidea, and mealybugs *Phenacoccus* sp. of the family Pseudococcidae. These hemipteran bugs are providing honeydew as a source of carbohydrate to the yellow crazy ant, which is essential for the growth and development of the ant population. In return, the crazy ants are protecting these insects from predators like ant-mimicking spiders *Myrmarachne* sp. and garden lizards *Calotes versicolor* (Daudin, 1802). This mutualistic ecological interaction may be one of the causes of the success of invasiveness of the yellow crazy in Ganjam, Odisha. In this invaded area unicoloniality of the ant nets have been noticed, which is adding to the adaptive advantage of this invasive species.

Keywords: Ecological interaction, Polydomy, Polygynous, Supercolony