SCIENTIFIC NOTE

NEW RECORDS OF CYCLOCEPHALA DEJEAN (COLEOPTERA: SCARABAEIDAE: DYNASTINAE) ASSOCIATED WITH CALADIUM BICOLOR (AITON) VENT. (ARACEAE)

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Floral associations between cyclocephaline beetles (Scarabaeidae: Dynastinae) and Araceae species have been widely documented in the Neotropics (Gottsberger and Amaral 1984; Gottsberger 1986; Young 1986, 1988, 1990; Gottsberger and Silberbauer-Gottsberger 1991; Beath 1999; Gibernau et al. 1999; Gibernau and Barabé 2002; Gibernau 2003; Gibernau et al. 2003; Maia and Schlindwein 2006; Maia et al. 2010; Gottsberger et al. 2013). Neotropical cyclocephaline species have been recorded from the inflorescences of ten Araceae genera native to that biogeographic region (Moore and Jameson 2013). Most cyclocephaline/Araceae floral association data are for species in the genera *Cyclocephala*, *Monstera*, *Dieffenbachia*, *Philodendron*, *Syngonium*, *Taccarum*, and *Xanthosoma*. Other Araceae genera (e.g., *Caladium*, *Monstera*, *Rhodospatha* Poepp., and *Taccarum* Brongn. ex Schott) are known to be visited by cyclocephalines based on very limited data. Typically, these limited records are based on observations made at only one locality or for one species in a particular Araceae genus (Moore and Jameson 2013). In this paper, I report new cyclocephaline floral association data for one of these poorly known genera, *Caladium*, which previously had cyclocephaline visitation data limited to Brazil, French Guiana, and Suriname.

Two species of *Cyclocephala* Dejean have been reported in the inflorescences of *Caladium bicolor* (Aiton) Vent.: *Cyclocephala celata* Dechambre in Pernambuco, Brazil (Maia and Schlindwein 2006) and *Cyclocephala rustica* (Olivier) in Brownsberg, Suriname and French Guiana (Pellmyr 1985; Moore and Jameson 2013). *Cyclocephala atricapilla* Mannerheim was observed in the inflorescences of an unidentified *Caladium* species from Maranhão, Brazil (Gottsberger 1986). This unidentified *Caladium* species was compared to *Xanthosoma striatipes* (Kunth and C. D. Bouché) Madison (reported as the synonym *Caladium striatipes* (Kunth and C. D. Bouché)) (Gottsberger 1986).

Populations of the aroid *C. bicolor* are commonly found as scattered patches in disturbed forest areas, along fragmented forest borders, and in clearings (Madison 1981; Croat 1988). *Caladium bicolor* is native to South and Central America, being reported from Panama, the Amazon basin of Suriname and throughout most of the Brazilian coast (Madison 1981). It has many cultivated varieties around the world and is a well-known ornamental plant (Mayo et al. 1997).

Visitation to *C. bicolor* inflorescences by cyclocephaline beetles was surveyed at three localities in Colombia during May 2011 and January and May 2012 (Table 1). All surveyed habitats were disturbed forest areas, fragmented forest borders, and clearings. Beetles found inside the *C. bicolor* inflorescences were collected into ethyl acetate and subsequently transferred to 70% ethanol. Plant samples of the inflorescence and leaves were collected for later identification. *Cyclocephala* specimens had their male genitalia dissected for species identification. Specimens are deposited in the private collection of the author.

Three *Cyclocephala* species were discovered as new records in the inflorescences of *C. bicolor*.

*Cyclocephala brittoni* Endrödi, 1964

At the Pandi locality, two males and two females were found in the spathe of a patch of *C. bicolor* inflorescences during anthesis. In one inflorescence, two individuals were found on the spadix, covered by floral exudates. At the Nuchia locality, one male was found on the spadix of a *C. bicolor* undergoing anthesis. All of these *C. bicolor* specimens were in open pasture. *Cyclocephala brittoni* has been found in inflorescences of three other species: *Annona*