

During a recent trip to Surinam I had the opportunity to observe a small population of the wellknown garden plant *Caladium bicolor* (Ait.) Vent. on the edge of its native habitat, the Amazon basin. The population grew along a road track on the Brownsberg Plateau, which is located approximately 100 km from the coast ( $N4^{\circ}55'W55^{\circ}15'$ ); it reaches about 500 m in altitude, and is more or less completely covered with what is considered to be primary rain forest (H. Reichart, pers. comm).

The plants were currently in bloom, and they were examined for visiting insects. The first observations were made at noon on January 29 in a small stand containing eight flower-bearing individuals. Of these, one was in early bud stage, five (that stood slightly apart) were in the receptive stage, one was in early post-receptive stage (with brown reticulum on the spadix), and one had its spathe almost completely wilted. The following day another stand was discovered about 300 m away from the first one. Out of four flowers, three were in the receptive stage, while one was still in bud. In no case during either of the days could any odor be perceived from the flowers.

All flower-bearing individuals that were in the receptive stage had individuals of *Cyclocephala rustica* (Olivier) (Coleoptera, Scarabaeidae) sitting at the base of their spadix, i.e. with their heads at the pistillate flowers. In seven cases the spathe contained one beetle, and in one it contained two. Due to their large size (body length ~20mm), the beetles most likely must use force when making their way down to the base of the spathe, where they sit tightly pressed between spathe and spadix.

No foraging activity was recorded. This could have been an effect of the considerable disturbance needed to unveil the beetle inside the spathe. Beach (1982) suggest that in addition to feeding places, the plants also serve as daytime shelters and mating-sites to the beetles.

In recent years, members of *Cyclocephala* and other beetles of the cyclocephaline tribe have been recorded as flower visitors and/or pollinators of plant species from at least six families (Table 1). Several beetles have previously been reported to be pollinators of Araceae (e.g. van der Pijl 1973, Kullenberg 1953, Meeuse & Hatch 1960), but no species of *Cyclocephala* have so far been associated to a specific member of the family.

The record of *Cyclocephala rustica* as a tentative pollinator of *Caladium bicolor*, together with the largely unpublished records from other araceous plants,

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indicate a potentially profitable field of studies in pollination of tropical Araceae. This might also reveal previously unexpected evolutionary convergencies with respect to pollination systems between otherwise distantly related plant families.

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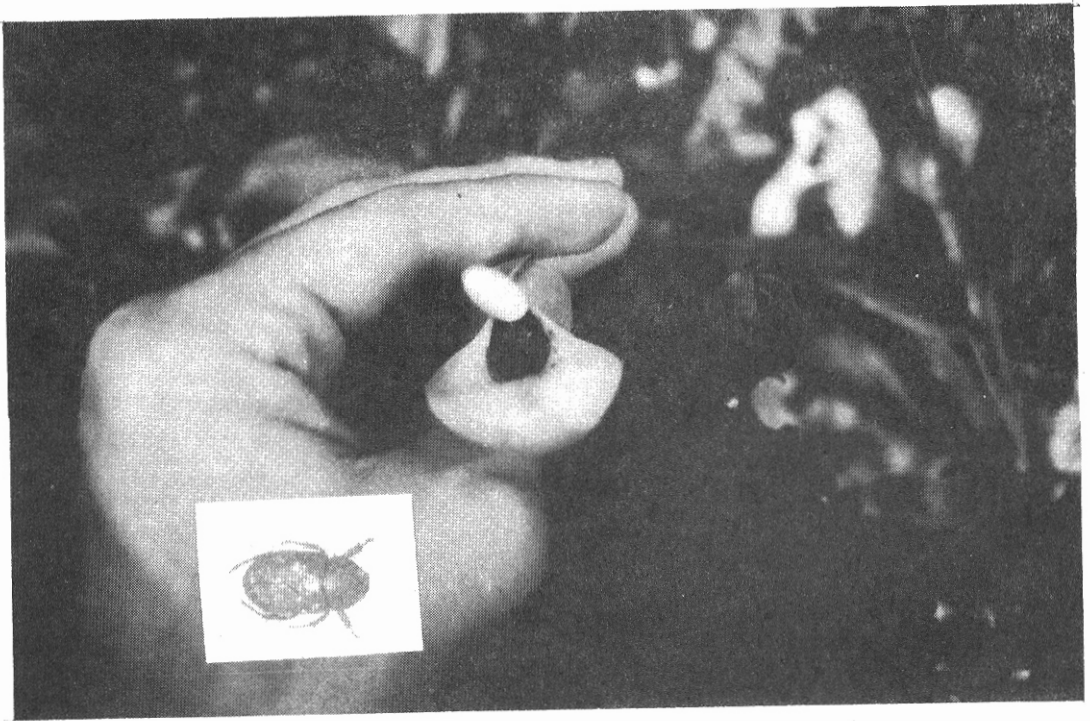


FIG. 1 - *Caladium bicolor* with *Cyclocephala rustica* hiding inside the inflorescence.

**Table 1.** Plants presently known to be visited by cyclocephaline beetles.

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Annonaceae	Schatz, pers. comm.
<b>Annona</b>	Beach 1982
<b>Cymbopetalum sp.</b>	Beach pers. comm.
Araceae	
<b>Caladium spp. (not bicolor)</b>	Croat pers. comm.
<b>Caladium striatipes</b>	Schrottky 1910
<b>Caladium bicolor</b>	Present study
<b>Dieffenbachia spp.</b>	Beach 1982, Young pers. comm.
<b>D. longispatha</b>	Beach pers. comm.
<b>D. piltieri</b>	Beach pers. comm.
<b>Philodendron spp.</b>	Beach 1982, Croat pers. comm.
<b>P. grandipes</b>	Beach pers. comm.
<b>Syngonium spp.</b>	Croat pers. comm.
<b>Xanthosoma spp.</b>	Beach 1982, Croat pers. comm.
Arecaceae	
<b>Bactris gassipaes</b>	Beach pers. comm.
<b>Bactris porschiana</b>	Beach pers. comm.
Cyclanthaceae	
<b>Cyclanthus bipartitus</b>	Beach 1982
Lecythidiaceae	Prance 1976
Nymphaeaceae	
<b>Nymphaea amazonum</b>	Cramer et al. 1975
<b>N. blanda var. fenzliana</b>	Cramer et al. 1975
<b>N. rudgeana</b>	Cramer et al. 1975, Prance and Arias 1976
<b>Victoria amazonica</b>	Prance and Arias 1975
<b>V. cruziana</b>	Valla and Cirino 1972

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