

Janeiro, and is an area built on several landings on a natural elevation, used for aesthetical, recreational and teaching purposes and containing six tanks of different levels. They are fed by a big water tank and are maintained full during all the year. The characteristic vegetation of the tanks consists of mainly: *Elodea canadensis* and *E.densa* (Hydrocharitaceae), *Eichhornia crassipes* (Pontederiaceae), *Nymphaea* sp. (Nymphaeaceae) and *Utricularia* sp. (Utriculariaceae). We report now the results of a study of the odonate fauna of these tanks, as a first step toward the understanding of the adaptation of dragonflies to the urban environment of the city of Rio de Janeiro.

During the months of September to December 1985 and January to April 1986 periodical visits were made to the study area in order to collect larvae and imagines. The imagines were collected near the tanks except for *Triacanthagyna septima* Sel. which was collected inside the building of Colegio Pedro II. Most of the larvae were collected on the roots of Aguapé (*Eichhornia crassipes*) and in the branches of Elodeas. They were reared in small styrofoam boxes yielding 48 emergencies. Identification was always based on adult characters.

Table I — Odonata collected at Mini-Horto Sylvio Potsch in Rio de Janeiro

Species	Sept	Oct	Nov	Dec	Jan	Feb	Apr
<i>Acanthagrion cuneatum</i>	X	X	X		X		X
<i>A. gracile</i>			X	X	X		X
<i>Ischnura (C.) capreola</i>		X	X	X	X		X
<i>I. fluviatilis</i>						X	
<i>Telebasis filiola</i>		X	X	X	X	X	X
<i>Coryphaeschna adnexa</i>	X				X	X	
<i>Triacanthagyna septima</i>			X				
<i>Brachymesia furcata</i>		X	X		X		
<i>Erythrodiplax anomala</i>			X				
<i>E. connata</i>	X	X	X	X	X	X	X
<i>E. umbrata</i>							X
<i>Miathyria marcella</i>					X		
<i>M. simplex</i>			X				X
<i>Micrathyria atra</i>				X			
<i>M. catenata</i>		X	X				
<i>M. hesperis</i>	X	X	X		X	X	X
<i>M. hipodydima</i>	X		X				
<i>Orthemis furruginea</i>			X				
<i>Pantala flavescens</i>			X				

THE ADAPTATION OF DRAGONFLIES TO URBAN ENVIRONMENT IN RIO DE JANEIRO. I. THE DRAGONFLIES OF MINI-HORTO SYLVO POTSCHE

The Mini-Horto Sylvio Potsch is situated at Colegio Pedro II in São Cristóvão, Rio de

Larvae of the following species were collected in the tanks: Coenagrionidae: *Acanthagrion gracile* (2 ♂, 4 ♀), *Ischnura (Ceratura) capreola* (2 ♂, 1 ♀), *I. fluviatilis* (2 ♂, 1 ♀), *Telebasis filiola*

(5 ♂, 3 ♀). — Aeshnidae: *Coryphaeschna adnexa* (3 ♀); — Libellulidae: *Brachymesia furcata* (5 ♂), *Erythrodiplax connata fusca* (4 ♂, 7 ♀) *Miathyria marcella* (1 ♂), *M. simplex* (2 ♂), *Micrathyria hesperis* (3 ♂, 3 ♀). The larvae of *M. hesperis* Ris and *Telebasis filiola* Perty are still undescribed. Table I contains a list of all the species collected in the area during the seven months of study. To these should be added *Erythemis mithroides* Br. that was seen by Professor Newton Dias dos Santos flying over one of the tanks.

These species represent part of the lentic odonate fauna of the city of Rio de Janeiro, whose numbers will certainly increase as more sites are studied. Since the Mini-Horto primitively had no tanks the species probably colonized the area from other public urban tanks or from areas in the neighbourhood of the city of Rio de Janeiro.

Indeed all the species collected at the Mini-Horto have been recorded from such areas mainly from "Recreio dos Bandeirantes" (N.D.

SANTOS, 1965, *Atas Soc. Biol. Rio de J.* 9: 103-108; 1970, *ibid.* 13: 75-77) and the larva of *Coryphaeschna adnexa* (Hag.) was described from a tank in the Rio de Janeiro Zoo (SANTOS, 1970).

Our results show that the tanks of Mini-Horto contain 20 species of dragonflies which became adapted to the urban environment. As could be expected, this number is higher than the fourteen species reported by E. ROTA & C. UTZERI (1985), *Notul. odonatol.* 2: 95-97) for tanks in the Roman parks. As far as we know, no similar study has been performed in South America to which we could compare our data.

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