
RESEARCH NOTE

Seasonality of *Phaeotabanus fervens* (Diptera: Tabanidae) in the Pantanal Region, Brazil

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Phaeotabanus fervens (Linnaeus), 1758 is a neotropical tabanid species distributed from Venezuela to Argentina (GB Fairchild 1971 *Ed Mus Zool Univ São Paulo* 28: 28-56). This horsefly is one of the few species reported biting exclusively on caimans (*Caiman sclerops*, *Melanosuchus niger*, *Paleosuchus palpebrosus* and *Paleosuchus trigonatus*) only on their head (F Medem 1981 *Cespedesia* 10: 123-191). Probably due to its host specificity very few data about this species are available. Caiman feeders such as *Lepiselaga crassipes* (F.), *Phaeotabanus cajennensis* (F.) and *Phaeotabanus fervens* (Medem *loc. cit.*) occur in the Pantanal region and unidentified general photographic records are available (H Palo Jr 1992 *Pantanal Ed Cor/Ação* 123 pp.).

The Center of Agricultural Research for Pantanal (CPAP/EMBRAPA), located in the Corumbá town near the Bolivian frontier at the western border of the Brazilian Pantanal, maintained some caimans (*Caiman crocodilus yacare*) for biological studies. On some occasions

P. fervens could be frequently observed flying against window glasses around the caiman pools. These tabanids were basically seen only at these sites and despite the lack of feeding observations it seemed obvious that their presence was due to the caimans (the only host present except humans).

A few sporadic tries to capture tabanids using caimans as bait were carried out on a ranch 150 km from town but no individuals were caught. Also monthly surveys, carried out from 1992 to 1994 with canopy traps and horses, were unsuccessful for catching *P. fervens* in the same area. It is possible that the collections were conducted outside of the spatial or temporal distribution of the flies and/or the techniques used were not the most effective methods for this species.

In more than 300 observations, from 1988 to 1993, 77 *P. fervens* voucher specimens were caught manually or with sweep nets from the windows near the caiman pools at CPAP. It was verified that this species showed a very defined seasonal pattern, occurring from September to November, after the beginning of the rainy season. In Colombia, Medem (*loc. cit.*) found *P. fervens* from November to March during collections over five years, however, he gathered some specimens in September and October during an expedition to the Brazilian Amazon. In the Pantanal the population peak of *P. fervens* was generally observed in October (also in November) and none was seen in December. This distribution coincides with the peak of most tabanid species in the region.

Since other haematophagous flies are recorded as trypanosome vectors for crocodiles (CA Hoare 1929 *Trans R Soc Trop Med Hyg* 23: 39-56) and there is a high prevalence (46%) of *Trypanosoma* spp. infection in *C. c. yacare* from Pantanal (VLB Nunes, ET Oshiro, personal communication), it would be important to investigate a possible role played by tabanid species in trypanosome transmission to caimans.

