

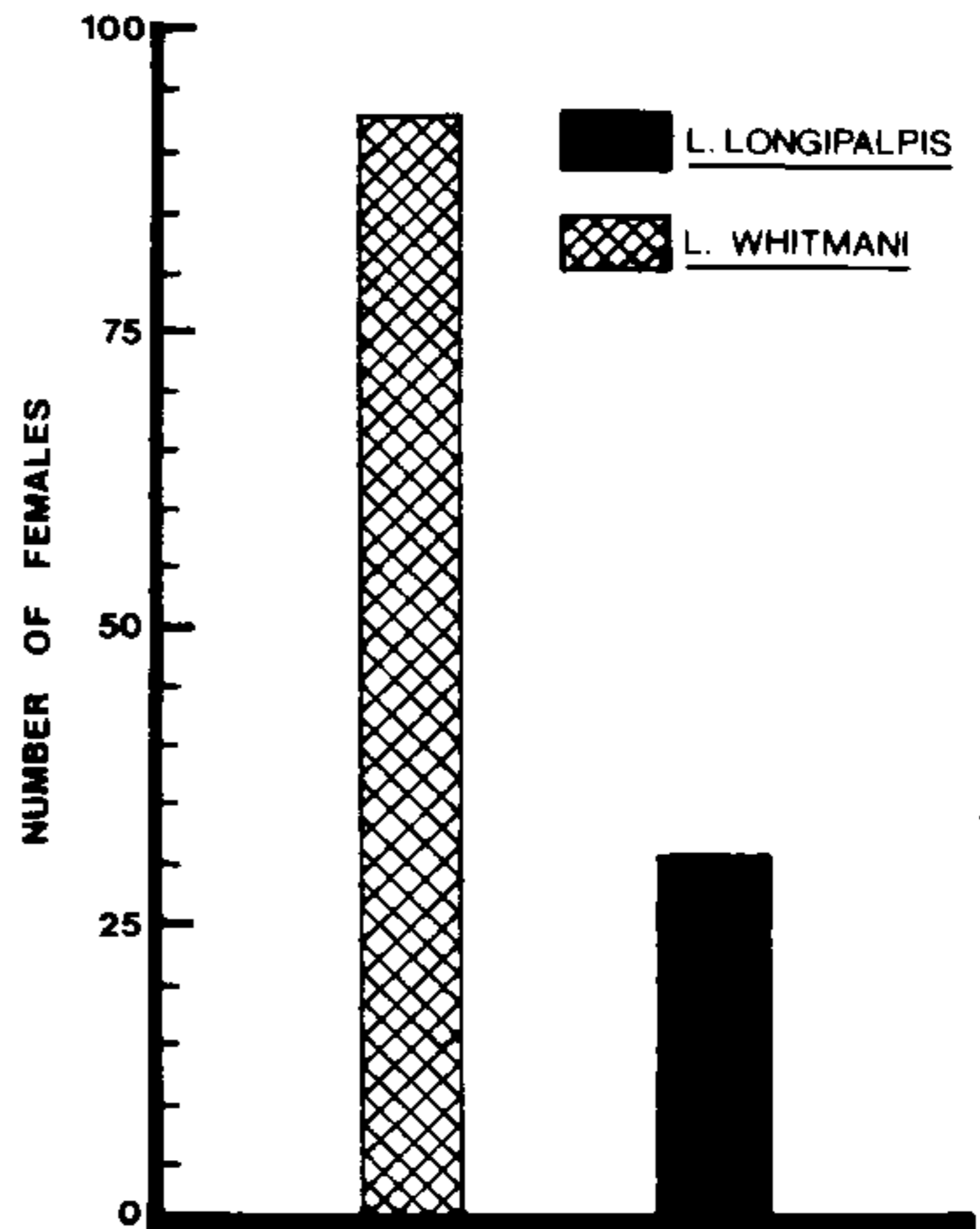
NOTES OF THE FEEDING HABITS OF *LUTZOMYIA* (*NYSSOMYIA*)
WHITMANI (DIPTERA PSYCHODIDAE) IN CEARA STATE,
NORTHEAST BRAZIL

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Lutzomyia whitmani is widely distributed in South America and it has been shown to be the vector of cutaneous leishmaniasis in several localities of Brazil (W. Mayrink et al., 1979, *Ann. Trop. Med. Parasitol.*, 73: 123-137; A. Hock et al., 1986, *Mem. Inst. Oswaldo Cruz*, 81: 44; L. Ryan et al., 1987, *Trans. R. Soc. Trop. Med. Hyg.*, 81: 353-359). This sandfly has shown geographical differences in respect to feeding activities which have led to some speculation that *L. whitmani* is a species complex (R. Killick-Kendrick, 1990, *Med. Vet. Entomology*, 4: 1-24; E. Rangel et al., 1990, *Mem. Inst. Oswaldo Cruz*, Supp. I, 85: 122).

In Ceará state *L. whitmani* is the proven vector of *Leishmania braziliensis* (A. Azevedo et al., 1990, *Mem. Inst. Oswaldo Cruz*, 85: 251) although other species may be found to be secondary vectors (S. Sallenave et al., 1990, *Mem. Inst. Oswaldo Cruz*, Supp. I, 85: 29). During the study of the biology of *L. longipalpis* in Ceará, a series of captures were performed in the region of Raposa, municipality of Baturité, using human bait. The captures were made outdoors between 6:00 and 8:00 PM during six consecutive nights in the month of June of 1990. All the catches were made at the same site, 2 m from a chicken coop and 2 m from a house. Sandflies were taken alive for dissection and identification in the field lab. At the time of our work, there were no reports of any cases of cutaneous or visceral leishmaniasis in the vicinity. A total of 122 female sandflies were captured with human bait and only *L.*



Sandflies captured in Baturité, Ceará on human bait.

whitmani and *L. longipalpis* were shown to be attracted to man (Fig.). Other species such as *L. evandroi*, *L. migonei* and *L. lenti* were present just 2 m from the human bait in the chicken coop using a CDC light trap. Out of 122 female, 92 (75%) were *L. whitmani* which demonstrates its highly anthropophilic behaviour in contrast to the amazonian *L. whitmani* that is poorly attracted to man (R. Lainson, 1988, *Phil. Trans. R. Soc.*, 321: 385-404). Two other captures using human bait, in another area of the state (Sobral), 200 km northwest of Baturité, confirmed the anthropophily of *L. whitmani* which made up 83.3% of the captures followed by *L. longipalpis* (16.3%). The predominance of *L. whitmani* has also been

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observed in other regions of the northeast by L. Ryan et al. (1990, *Trans. Med. Hyg.*, 84: 786) and A. Azevedo et al. (*loc. cit.*). It seems that *L. whitmani* is no longer a sylvatic sandfly in northeast Brazil with marked adaptation to the new environment created by man becoming

the most anthropophilic and dominant species in northeast Brazil.

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