

ENTOMOLOGIC SURVEY OF POTENTIAL OF ARBOVIRUSES IN THE COMBÚ ISLAND, BELÉM, PARÁ STATE

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INTRODUCTION

Culicidae mosquitoes are the most important vectors for several public health important arboviruses. The knowledge of the role played by Culicidae insects is an important step for control measures of Dengue, Yellow Fever, Mayaro, and Oropouche viruses. Entomologic studies were carried out in the Island of Combú, a small island situated at left margin of Guamá river in the municipality of Belém, state of Pará.

MATERIAL and METHODS

Captures were performed during the months of August and September 1994 (15 days), the month of March and April 1995 (20 days) and in November 2003 (18 days). Insects were collected at ground level and at forest canopy at 12-15 meters between 9:00 - 14:30.

RESULTS

A total of 19,794 (Table 1) insects were obtained belonging to forty Culicidae species, 12,824 (64.8%) of them obtained at ground and 6,970 (35.2%) in the canopy, that furnished 451 lots for inoculation into suckling mice. The most prevalent species were *Psorophora albipes* 11,499 (58.1%), *Ochlerotatus serratus* 3,404 (17%), *Wyeomyia* sp. 1,029 (5%), *Ps. ferox* 571 (2.5%), *Culex* (Mel.) sp. 470 (2%), *Sabethes glaucodaemon* 399 (2%), *Oc. fulvus* 392 (1.9), *Limatus durhamii* 371 (1.8%), *Coquillettidia venezuelensis* 255 (1.2%), *Phoniomyia* sp. 197 (1%), *Cx. spissipes* 193 (1%), *Li. sp.* 182 (1%), *Anopheles intermedius* 131 (0,7%), *Sa. chloropterus* 116 (0,6%), *Haemagogus tropicalis* 111 (0,5%). After inoculation, none arboviruses were isolated.

CONCLUSIONS

Further studies are needed for a better understanding of the fauna of haematophagous insects in Combú Island, and to evaluate a possible occurrence of arboviral transmission cycle there.

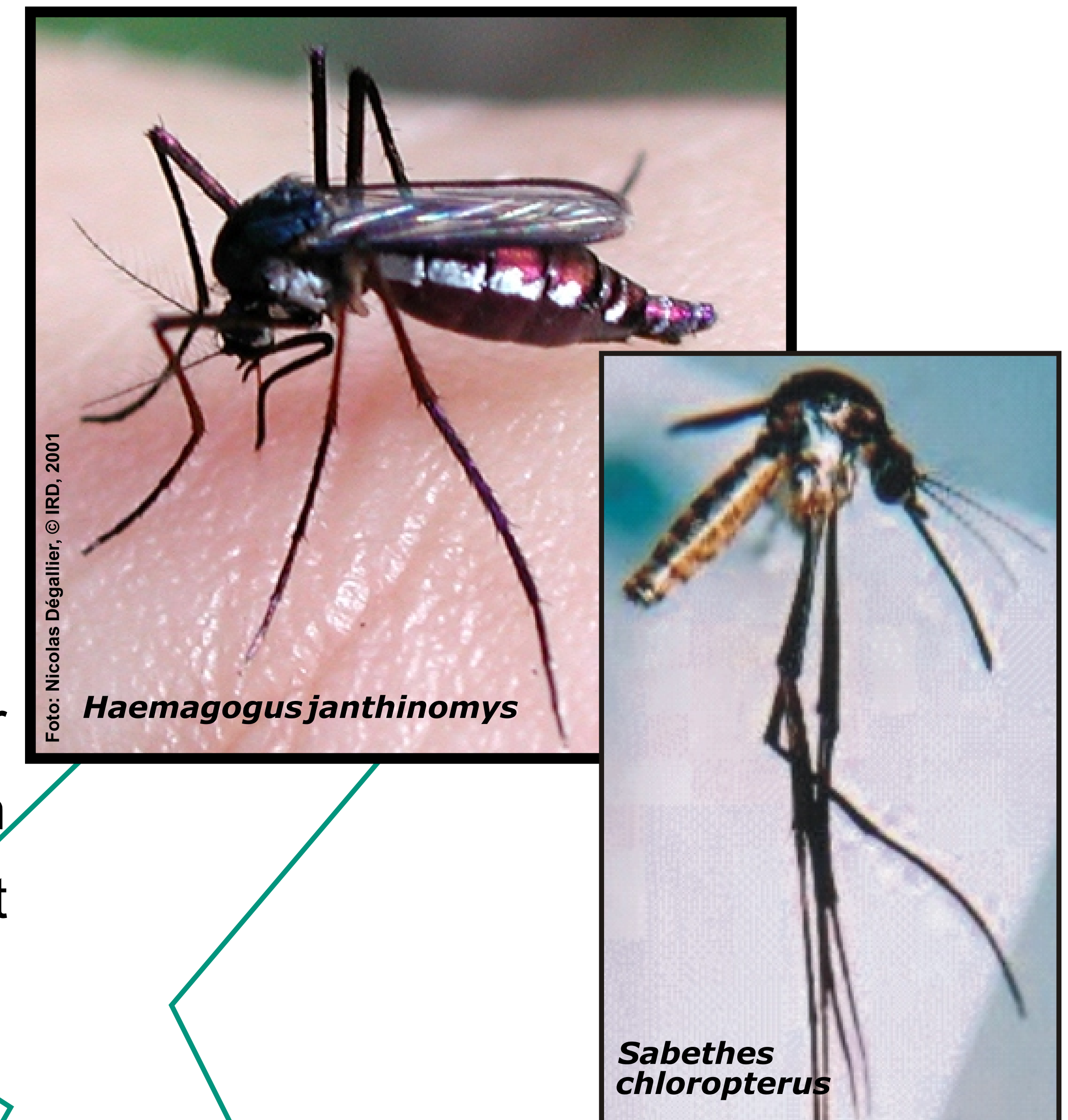


TABLE 1 Frequency distribution of mosquitoes Culicidae collected in Combú Island, Pará State, Brazil.

Species	Canopy		Ground		TOTAL GERAL	
	Nº	%	Nº	%	Nº	%
<i>An. (Nys) species</i>	0	0	3	0,02	3	0,015
<i>An. (Ano) species</i>	0	0	4	0,03	4	0,02
<i>An. (Ano) intermedius</i>	0	0	131	1,02	131	0,66
<i>Cx. (Mel) species</i>	6	0,086	464	3,6	470	2,37
<i>Cx. (Mel) pedroi</i>	0	0	6	0,05	6	0,03
<i>Cx. (Mel) ocelatus</i>	0	0	2	0,015	2	0,01
<i>Cx. (Mel) spissipes</i>	0	0	193	1,5	193	1,0
<i>Cx. (Cux) declarator</i>	0	0	2	0,015	2	0,01
<i>Cq. (Rhy) species</i>	0	0	72	0,6	72	0,36
<i>Cq. (Rhy) venezuelensis</i>	0	0	255	2,00	255	1,3
<i>Hg. (Hag) janthinomys</i>	6	0,086	0	0	6	0,03
<i>Hg. (Hag) tropicalis</i>	85	1,2	26	0,2	111	0,56
<i>Hg. (Hag) tropicalis macho</i>	8	0,11	5	0,04	13	0,06
<i>Johnbelkinia longipes</i>	0	0	26	0,2	26	0,13
<i>Limatus paraensis</i>	0	0	4	0,03	4	0,02
<i>Li. species</i>	8	0,11	174	1,35	182	0,919
<i>Li. durhamii</i>	11	0,16	360	2,8	371	1,87
<i>Li. flavisetosus</i>	0	0	12	0,09	12	0,06
<i>Ma. (Man) titillans</i>	0	0	3	0,02	3	0,015
<i>Oc. (Och) serratus</i>	98	1,4	3306	25,8	3404	17,2
<i>Oc. (Pro) argyrothorax</i>	0	0	5	0,04	5	0,025
<i>Oc. (Och) hortator</i>	0	0	78	0,6	78	0,40
<i>Oc. (Och) scapularis</i>	0	0	11	0,085	11	0,055
<i>Oc. (Och) fulvus</i>	8	0,11	384	3,00	392	2,0
<i>Runchomyia species</i>	0	0	1	0,008	1	0,005
<i>Ru. (Cte) magna</i>	19	0,27	68	0,55	87	0,44
<i>Phoniomyia species</i>	4	0,55	193	1,5	197	1,0
<i>Ps. (Jan) albipes</i>	6006	86,0	5493	42,8	11499	58,10
<i>Ps. (Jan) ferox</i>	53	0,70	518	4,0	571	2,90
<i>Ps. (Jan) lutzii</i>	0	0	21	0,16	21	0,10
<i>Sa. (Sab) belisarioi</i>	14	0,2	4	0,03	18	0,09
<i>Sa. cyaneus</i>	1	0,014	1	0,008	2	0,01
<i>Sa. (Sbo) chloropterus</i>	116	1,60	0	0	116	0,59
<i>Sa. (Sbo) glaucodaemon</i>	382	5,5	17	0,13	399	2,00
<i>Sa. (Sab) quasicyaneus</i>	26	0,35	1	0,008	27	0,14
<i>Sa. (Sab) tarsopus</i>	21	0,3	0	0	21	0,10
<i>Trichoprosopon species</i>	7	0,1	3	0,02	10	0,05
<i>Tr. (Trc) digitatum</i>	0	0	3	0,02	3	0,015
<i>Tr. (Cte) magnum</i>	30	0,4	4	0,03	34	0,17
<i>Wy. (Den) melanocephala</i>	0	0	3	0,02	3	0,015
<i>Wy. species</i>	61	0,8	968	7,55	1029	5,2
TOTAL GERAL	6970	100	12824	100	19794	100

