

## COMUNICAÇÃO

### NO CHANGE IN ONE BIOLOGICAL PARAMETER FOR *DIPETALOGASTER MAXIMUS* AFTER 20 YEARS OF LABORATORY COLONISATION

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The value of *Dipetalogaster maximus* as a xenodiagnostic agent has been reviewed<sup>2</sup>. We have always worried that the due to inbreeding in our laboratory colony our off-spring would suck less blood. An opportunity to test this risk arrived with 60 eggs retrieved from a wild caught female of the Baja California Peninsula. Instars from these eggs were weighed before and after each meal. A control group of same instar bugs from the Brasília colony which has been in existence twenty years was investigated at the same time. All bugs were maintained at 26°C and 70% humidity and fed on chicken blood. They were weighed individually on a balance sensitive to 0.5 milligram. Thirty individuals of each juvenile instar were used and ten of both sex adults for the two colonies 1973 and 1993. The results are shown in the Tables. The statistical analysis is that of Levine<sup>1</sup> for comparing samples of different size.

Table 1 shows the summarised data of blood meal weight in the two colonies 1973 and 1993. Table 2 records the T values (actual and expected) and the degree of freedom related to this data. Only two instars were significantly different in the two colonies. The second instar fed significantly more in the 1993 group and adult females the reverse (a stage of more relevance to our colony needs). Possibly if the groups had been larger these differences would also disappear. The data suggest that after twenty years in colony blood ingestion of the different instars of *D. maximus* has not changed.

Table 1 - Mean weight in miligrams and standard deviation of blood ingested by instar groups of 1973 and 1993 colonies of *Dipetalogaster maximus*.

Instar	Colony 1973		Colony 1993	
	mean	SD	mean	SD
1	91	15	76	32
2	174	37	255	45
3	430	112	539	90
4	780	322	831	217
5	988	838	618	737
0	683	460	460	327
0	2203	1242	907	1006

Table 2 - Statistical significance<sup>1</sup> of data ( $p < 0.1$ ) comparing the two groups of 1973 and 1993 colonies of *Dipetalogaster maximus*.

Instar	T value obtained	T value expected	Degree of freedom
1	1838	2704	36
2	4900	2704	36
3	2495	2704	36
4	394	2704	36
5	1781	2704	35
0	2737	3106	11
0	5470	3106	11

<sup>1</sup> Note: only instar II and females show significance.

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#### REFERENCES

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