



INTRODUCTION

Project "Survey of the Entomological Fauna in Paraná" (PROFAUPAR) was carried out in Parana, Brazil

- Researchers from the Department of Zoology of Federal University of Parana
- Two years: from August 1986 to July 1988
- A Malaise and a light trap at each site
- Material was collected weekly from the Malaise trap
- Eight localities were chosen: different geomorphological and floristic areas in the state
- It was the first entomological survey in Parana with methodology.

MALAISE

Two years – weekly - 104 samples

First year - August 1986 to July 1987
832,542 insect specimens (MARINONI & DUTRA 1993)
649,753 FLIES - 1,617 SYRPHIDS

Second year - August 1987 to July 1988
1,692 SYRPHIDS

Total: 3,316 specimens of Syrphidae

MAIN OBJECTIVE of the present work

- Seasonality of the five most abundant species in two years of PROFAUPAR
- *Toxomerus procrastinatus* Metz,
- *T. tibicen* Wiedemann
- *Leucopodella gracilis* Williston
- *Microdon mitis* Curran and
- *Paramicrodon flukei* Curran

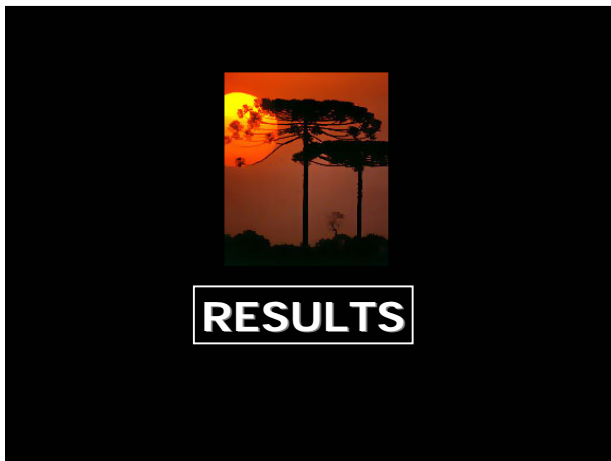
MATERIAL AND METHODS

Paraná State

PROFAUPAR Localities

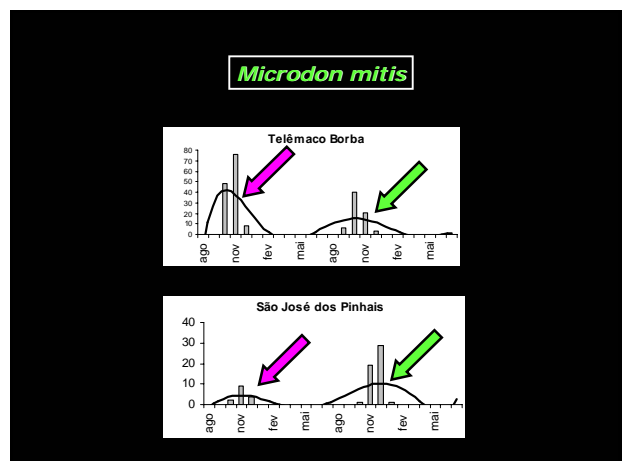
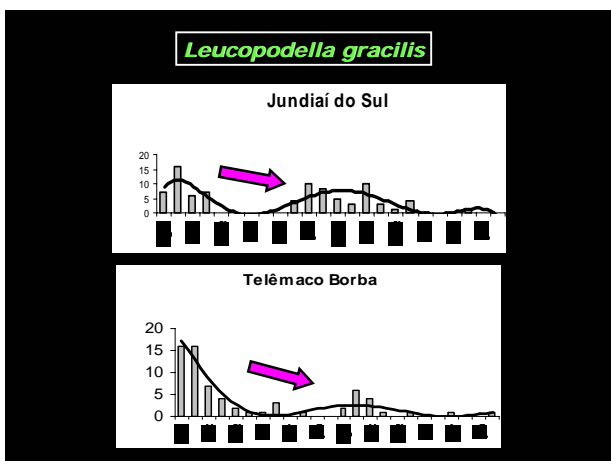
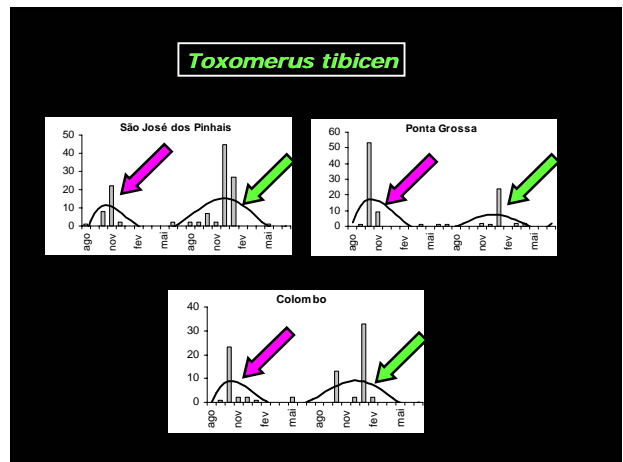
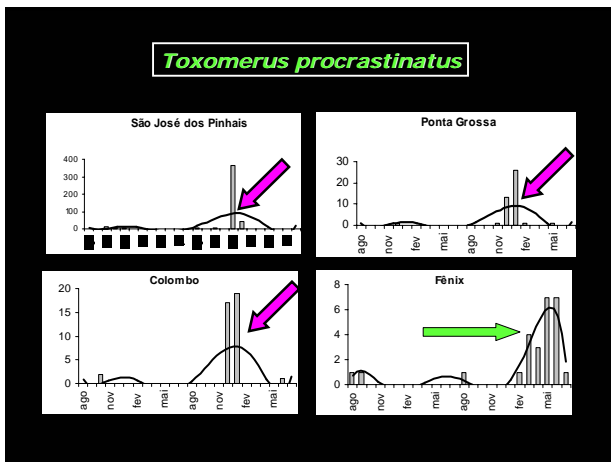
- Coastal zone
- First Plateau
- Second Plateau
- Third Plateau

1 Antonina	5 Telêmaco Borba
2 São José dos Pinhais	6 Jundiá do Sul
3 Colombo	7 Guarapuava
4 Ponta Grossa	8 Fênix

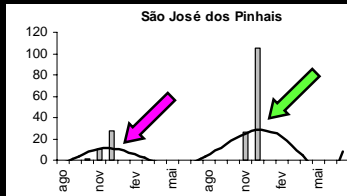


		86/87								
Species	AN	CO	FE	GU	JS	PG	SJ	TB	Total	
<i>Toxomerus procrastinatus</i>	2	2	2	2	2	1	24	5	40	
<i>Toxomerus tibicen</i>	6	31	7	15	4	66	35	2	166	
<i>Leucopodella gracilis</i>	0	5	13	1	58	6	1	51	135	
<i>Microdon mitis</i>	1	0	0	0	0	0	15	132	148	
<i>Paramicrodon flukei</i>	0	0	0	0	0	2	39	0	41	

		87/88								86/88
Species	AN	CO	FE	GU	JS	PG	SJ	TB	Total	Total
<i>Toxomerus procrastinatus</i>	3	37	24	2	2	42	419	3	532	572
<i>Toxomerus tibicen</i>	6	50	4	9	2	31	86	1	189	355
<i>Leucopodella gracilis</i>	1	2	5	0	27	0	1	16	52	187
<i>Microdon mitis</i>	0	0	0	0	0	0	50	70	120	268
<i>Paramicrodon flukei</i>	0	0	0	0	0	0	131	0	131	172



Paramicrodon flukei



FINAL CONSIDERATIONS

T. procrastinatus, *T. tibicen* and *Leucopodella gracilis* were collected in all the localities

The two species of *Toxomerus* were most abundant in colder areas of Parana: São José dos Pinhais, Colombo and Ponta Grossa; their seasonality were very similar in all the localities except in Fenix, the hottest locality among the eight, where the species were collected in the colder months. This fact indicates a relation of the distribution of *Toxomerus* species to temperature.

Leucopodella gracilis was most abundant in places recognized as with few incidence of rains and hot, Telemaco Borba and Jundiá do Sul.

The restricted occurrence of *Microdon mitis* and *Paramicrodon* are probably related to the distribution of the Hymenoptera they are related

All the species were most abundant during the months of spring and summer, except for *Leucopodella gracilis* that was most abundant in autumn and winter.