

PREFACE

Aphids and their natural enemies were central stage from 1st to 6th of September, 2002, at the University of the Azores in Ponta Delgada. Aphids were recorded as major pests early in the XXth Century (GAUMONT 1977) and continue to threaten field and greenhouse crops. As a consequence, pesticides are used regularly and intensively, which hampers the move towards sustainable agriculture. In theory, biological control of aphids is an alternative to chemical control but the record of biological control is not good (DIXON 2000). This does not mean that biological control should be abandoned. On the contrary, we should attempt to improve it, and this is the main objective of the IOBC Working Group "Ecology of aphidophaga".

Traditionally the majority of the communications presented at the meetings of this Working Group are on ladybird beetles. This was also the case at this meeting but the prominence of ladybirds was not a deliberate attempt to restrict the scientific scope of the meeting. History partly explains the domination of ladybirds. The outstanding success of *Rodolia cardinalis* in California many years ago still influences these conferences. This is not the only explanation. Ladybirds are a good model organism for improving our understanding of the role of natural enemies in regulating herbivore populations. Parasitoids have, and continue to be used as models for studying predator-prey dynamics. However, the biology of parasitoids differs fundamentally from that of predators (DIXON 2000) and it is therefore unlikely that studies on parasitoids will shed light on all the theoretical and practical aspects of the interactions between prey and natural enemies. Studies on ladybirds complement those on parasitoids and give a better understanding of why the biological control of aphids sometimes fails. This was central to the interesting communications on predator-prey models, guild structure, fundamental biology and applications presented at the meeting.

For practitioners confronted with aphid outbreaks, however, theoretical studies may seem a waste of time. In the face of heavy economic losses immediate action often appears to be the only solution. KAREIVA (1996) has highlighted the risks of a "hit and miss" approach to biological control. However, a "search and wait" strategy, in which all efforts are directed to research while farmers sit and wait for a solution, is not practical. The future is a trade-off between research and practice. In theory there is an infinity of possible trade-offs, but which is the best? In Ponta Delgada the Scientific Committee decided that the Working Group should provide opportunities for practitioners of biological control and scientists to meet and discuss mutual problems. Through exchange of ideas and discussion of field results the right trade off will be approached and the gap between academics and practitioners of biological control progressively reduced.

The meeting in Ponta Delgada was fruitful in both scientific and strategic terms. I thank the University of the Azores for hosting the congress and the Local Committee for all its efforts and dedication. Muito obrigado pela sua hospitalidade!

The next meeting will be held in Japan at Yamagata University in September 2005. The first announcement is already on our web site (<http://www.bf.jcu.cz/tix/strita/aphidophaga/main.html>).

REFERENCES

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- KAREIVA, P. 1996. Contribution of ecology to biocontrol. *Ecology* 77: 1964-1965.