

KEEPING BUMBLEBEES FOR SCIENCE, EDUCATION AND PROFIT

In: *38th Apimondia International apicultural congress, Ljubljana, Slovenia, Aug. 24-29 2003. Final Programme and book of abstracts*. Ljubljana : Cankarjev dom, 2003. od s. 314-315, 1 s. ISBN 961-6157-15-9.

Vladimir Ptacek

Masaryk University of Brno, Faculty of Science, Kotlarska 2, 611 37 Brno, Czech Republic

ptacek@sci.muni.cz

In keeping bumblebees the most difficult event is the nest initiation by a queen. The process was simplified by transferring it into laboratory, where queens are kept in darkness, under constant temperature, humidity and adequate feeding. *Bombus terrestris* as the first species responded positively to laboratory conditions and was possible to be managed on the mass scale in late eighties of the last century. The technique has been currently improved and now it can serve as a standard for the group of species called "pollen storers". According to the model *Bombus lapidarius* could be reared quite simply, too. Positive results were obtained also in *Bombus lucorum*, but the colonies switched to queen production rather early. Promising response to laboratory conditions showed also *Bombus pascuorum*, which is known as the maker of wax feeding pockets under the young brood. Queens readily built egg cells and the first brood could be fed with a bit more carefulness by the operating staff. When the first workers emerged the colonies brought outside accepted additional feeding. The technique can serve as the second model for the group of species showing similar behaviour. Positive results were gained in *Bombus hortorum* and in one case even in *Bombus humilis*. Thus the improved of bumblebee management can serve as a source of colonies for pollination, education, scientific research and even the pleasure of a keeper. The conservation of biodiversity in both, the pollinators and their host plants is the self-evident gain, too. (Financial support: GACR-203/02/0158 and MU grant CEZ: J07/98:143100010)