PROCEEDINGS

Canadian Association of Professional Apiculturists

L'Association canadienne des professionnels de l'apiculture

International Federation of Beekeepers' Associations

Canadian Honey Council

Conseil Canadien du Miel

BeeMaid HONEY

Apimondia '99

Congress XXXVI^e Congrès

Vancouver 12-17 Sept. 1999

CANADA

MEDIVET

Simon Fraser University

Dadant

Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

Canadian Farm Business Management Council

Conseil canadien de la gestion d'entreprise agricole

ARATAKI HONEY

APISTAN

Honey

National Honey Board

British Columbia Ministry of Agriculture & Foods

Field assays for chalkbrood infection in colonies of *Apis mellifera iberica*

(38)

S.M.A. Pires* and A.R. Agustin Josa e Costa**; *Escola Superior Agraria de Braganca (Departamento de Zootecnia), Apartado 172, 5300 Bragança Codex, Portugal, **Facultad de Veterinaria de Zaragoza (Departamento de Patologia Animal), Miguel Servet 177, 50013 Zaragoza, Spain.

Colonies with naturally mated queens and instrumentally inseminated queens from a hygienic line of Iberian honey bees (*Apis mellifera iberica*) were compared to colonies from a line of Iberian bees not selected. for hygienic behaviour. The following characteristics were compared: the infection level among groups - considering that the group effect, with four levels, corresponds to the localisation influence of the distinct hives distributed by the apiary; the infection level among categories - considering that the categories effect, with three levels, corresponds to the influence of non-hygienic colonies, hygienic colonies with naturally mated queens and instrumentally inseminated queens related to the infection level in different periods of time; the interaction between groups and categories. The reduction of the infection level among groups seemed to have been essentially influenced by the effect of localisation of the distinct groups of hives distributed by the apiary and the reduction among categories seemed to have probably been affected by the type of mating to which the queens were submitted. This is the first study to evaluate the performance of chalkbrood infection in field colonies with naturally mated queens and instrumentally inseminated queens from a hygienic line of Iberian honey bees (*Apis mellifera iberica*) in the North - East part of Portugal.