Terrestrial Animal Health Standards Commission Report

October 2008

CHAPTER 9.3.

EUROPEAN FOULBROOD OF HONEY BEES

Article 9.3.1.

General provisions

For the purposes of this Chapter, European foulbrood is a disease of the larval and pupal stages of the honey bee Apis mellifera and other Apis spp., and occurs in most countries where such bees are kept. The causative agent is the non-sporulating bacterium Melissococcus pluton. Subclinical infections are common and require laboratory diagnosis. Infection remains enzootic because of mechanical contamination of the honeycombs. Recurrences of disease can therefore be expected in subsequent years.

For the purposes of the *Terrestrial Code*, the *incubation period* for European foulbrood shall be 15 days (not including the wintering period which may vary according to country).

Standards for diagnostic tests are described in the Terrestrial Manual.

Article 9.3.2.

Determination of the European foulbrood status of a country or zone/compartment

The European foulbrood status of a country or *zone/compartment* (under study) can only be determined after considering the following criteria:

- 1. a *risk assessment* has been conducted, identifying all potential factors for European foulbrood occurrence and their historic perspective;
- 2. European foulbrood should be notifiable in the whole country or *zone/compartment* (under study) and all clinical signs suggestive of European foulbrood should be subjected to field and *laboratory* investigations;
- 3. an on-going awareness programme should be in place to encourage reporting of all cases suggestive of European foulbrood;
- 4. the *Veterinary Authority* or other *Competent Authority* with responsibility for the health reporting and control of *diseases* of honey bees should have current knowledge of, and authority over, all *apiaries* in the whole country.

Article 9.3.3.

Country or zone/compartment (under study) free from European foulbrood

1. <u>Historically free status</u>

A country or *zone /compartment* (under study) may be considered free from the *disease* after conducting a *risk assessment* as referred to in Article 9.3.2. but without formally applying a specific *surveillance* programme if the country or *zone/compartment* (under study) complies with the provisions of Chapter 1.4.

2. Free status as a result of an eradication programme

A country or *zone/compartment* (under study) which does not meet the conditions of point 1 above may be considered free from European foulbrood after conducting a *risk assessment* as referred to in Article 9.3.2. and when:

- a) the *Veterinary Authority* or other *Competent Authority* with responsibility for the health reporting and control of *diseases* of honey bees has current knowledge of, and authority over, all domesticated *apiaries* existing in the country or *zone/compartment* (under study);
- b) European foulbrood is notifiable in the whole country or *zone/compartment* (under study), and any clinical cases suggestive of European foulbrood are subjected to field and *laboratory* investigations;
- c) for the 3 years following the last reported isolation of the European foulbrood agent, an annual survey supervised by the *Veterinary Authority*, with negative results, have been carried out on a representative sample of *apiaries* in the country or *zone/compartment* (under study) to provide a confidence level of at least 95% of detecting European foulbrood if at least 1% of the *apiaries* were infected at a within-*apiary* prevalence rate of at least 5% of the hives; such surveys may be targeted towards areas with the last reported isolation of the European foulbrood agent;
- d) to maintain free status, an annual survey supervised by the *Veterinary Authority*, with negative results, is carried out on a representative sample of hives in the country or *zone/compartment* (under study) to indicate that there has been no new isolations; such surveys may be targeted towards areas with a higher likelihood of isolation;
- e) (under study) there is no self-sustaining feral population of A. mellifera or other possible host species in the country or zone/compartment (under study);
- f) the importation of the *commodities* listed in this Chapter into the country or *zone/compartment* (under study) is carried out in conformity with the recommendations of this Chapter.

Article 9.3.4.

Recommendations on safe commodities

Regardless of the European foulbrood status of the exporting country, Veterinary Authorities should authorise without restriction the import or transit through their territory of honey bee semen and honey bee venom.

Article 9.3.5.

Recommendations for the importation of live queen honey bees, worker bees and drones with or without associated brood combs

Veterinary Authorities of importing countries should require the presentation of an international veterinary certificate attesting that the bees come from a country or zone/compartment (under study) free from European foulbrood.

Article 9.3.6.

Recommendations for the importation of eggs, larvae and pupae of honey bees

Veterinary Authorities of importing countries should require the presentation of an international veterinary certificate attesting that the products:

- 1. were sourced from a free country or zone/compartment (under study); or
- 2. have been isolated from queens in a *quarantine station*, and all workers which accompanied the queen or a representative sample of eggs or larvae were examined for the presence of *Melissococcus pluton* by bacterial culture or PCR.

Article 9.3.7.

Recommendations for the importation of used equipment associated with beekeeping

Veterinary Authorities of importing countries should require the presentation of an international veterinary certificate attesting that the equipment was sterilised under the supervision of the Veterinary Authority by either immersion in 0.5% sodium hypochlorite for at least 20 minutes (suitable only for non-porous materials such as plastic and metal), gamma irradiation using a cobalt-60 source at a dose rate of 10 kGy, or processing to ensure the destruction of Melissococcus pluton, in conformity with one of the procedures referred to in Chapter X.X. (under study).

Article 9.3.8.

Recommendations for the importation of honey, honey bee-collected pollen, beeswax, propolis and royal jelly

Veterinary Authorities of importing countries should require the presentation of an international veterinary certificate attesting that the products:

- 1. were collected in a country or zone/compartment (under study) free from European foulbrood; or
- 2. have been processed to ensure the destruction of *Melissococcus pluton*, in conformity with one of the procedures referred to in Chapter X.X. (under study).