

TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

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CHAPTER 9.3.

INFECTION EUROPEAN FOULBROOD OF HONEY BEES
WITH MELISSOCOCCUS PLUTONIUS
(EUROPEAN FOULBROOD)

Article 9.3.1.

General provisions

For the purposes of the *Terrestrial Code* this Chapter, European foulbrood is a *disease* of the larval and pupal stages of the honey bees (species of the genus *Apis*) *Apis mellifera* and other *Apis* spp., caused by *Melissococcus plutonius*, a non-sporulating bacterium, which is widely distributed and occurs in most countries where such bees are kept. The causative agent is the non-sporulating bacterium *Melissococcus plutonius*. 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*.

When authorising import or transit of the commodities covered in the chapter, with the exception of those listed in Article 9.3.2., Veterinary Authorities should require the conditions prescribed in this chapter relevant to the European foulbrood status of the honey bee population of the exporting country or zone.

Article 9.3.2.

~~Trade in~~ Safe commodities

When authorising import or transit of the following commodities, Veterinary Authorities should not require any European foulbrood related conditions, regardless of the European foulbrood status of the honey bee population of the exporting country or zone:

- 1) honey bee semen;
- 2) honey bee venom;
- 3) honey bee eggs.

~~When authorising import or transit of other commodities listed in this Chapter, Veterinary Authorities should require the conditions prescribed in this Chapter relevant to the European foulbrood status of the honey bee population of the exporting country or zone.~~

Article 9.3.3.

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 reporting and control of *diseases* of honey bees should have current knowledge of, and authority over, all *apiaries* in the whole country.

Article 9.3.4.

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

1. Historically free status

A country or ~~zone/compartment (under study)~~ may be considered free from the *disease* after conducting a *risk assessment* as referred to in Article 9.3.3. 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 9.3.3. and when:

- a) the *Veterinary Authority* or other *Competent Authority* with responsibility for 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* or other *Competent Authority*, with no positive ~~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* or other *Competent Authority*, with no positive ~~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)~~ either there is no wild or self-sustaining feral population of *A. mellifera* or other possible host species of the genus *Apis* in the country or ~~zone/compartment (under study)~~, or there is an ongoing surveillance programme of the wild or self-sustaining feral population of species of the genus *Apis* which demonstrates no evidence of the presence of the *disease* in the country or ~~zone~~;
- 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 9.3.5.

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

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

- 1) the honey bees come from an ~~apiaries~~ situated in a country or ~~zone/compartment~~ (under study) free from European foulbrood; or the apiary meets the conditions prescribed in Article 4.14.3
- 2) the shipment comprises only honey bees without associated brood combs and:
 - a) the honey bees come from an ~~apiaries~~ meeting the conditions prescribed in Article 4.14.5.; and
 - b) the ~~apiary~~ where the honey bees come from is situated in the centre of an area with a radius of 3 kilometres where there has been no outbreak of European foulbrood during the past 30 days.

Article 9.3.6.

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

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

- 1) come from an ~~apiaries~~ situated in ~~were sourced from a free~~ country or ~~zone/compartment~~ (under study) free from European foulbrood; 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 *M. plutonius* by bacterial culture or PCR in accordance with the *Terrestrial Manual*.

Article 9.3.7.

Recommendations for the importation of used apicultural equipment ~~associated with beekeeping~~

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

- 1) comes from an ~~apiaries~~ situated in a country or zone free from European foulbrood; or
- 2) was sterilised under the supervision of the *Veterinary Authority* in conformity with one of the following procedures:
 - a) by ~~either~~ immersion in 0.5% sodium hypochlorite for at least 20 minutes (suitable only for non-porous materials such as plastic and metal); or
 - b) by gamma irradiation ~~with using a cobalt-60 source at a dose rate of~~ 1015 kGy; or
 - c) by any procedure of equivalent efficacy recognised by the *Veterinary Authority of the importing and exporting countries*. ~~processing to ensure the destruction of *M. plutonius*, in conformity with one of the procedures referred to in Chapter recommended by the OIE (under study).~~

Article 9.3.8.

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

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

- 1) come from **an aparies** situated ~~were collected~~ in a country or ~~zone/compartement~~ (under study) free from European foulbrood; or
- 2) have been processed to ensure the destruction of *M. plutonius* by irradiation with **4015** kGy or any procedure of equivalent efficacy recognised by the *Veterinary Authority of the importing and exporting countries*; or, in conformity with one of the procedures referred to in Chapter X.X. recommended by the OIE (under study).
- 3) have been found free of *M. plutonius* by a test method described in the relevant chapter of the *Terrestrial Manual*.

Article 9.3.9.

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

Veterinary Authorities of importing countries free from European foulbrood should require the presentation of an *international veterinary certificate* attesting that the *commodities*:

- 1) come from **an aparies** situated in a country or *zone* free from European foulbrood; or
- 2) have been processed to ensure the destruction of *M. plutonius* by irradiation with **4015** kGy or any procedure of equivalent efficacy recognised by the *Veterinary Authority of the importing and exporting countries*; or
- 3) have been found free of *M. plutonius* by a test method described in the relevant chapter of the *Terrestrial Manual*.