

TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

FEBRUARY 2013 REPORT

CHAPTER 9.5.

**TROPILAEELAPS INFESTATION OF HONEY BEES
WITH TROPILAEELAPS SPP.**

Article 9.5.1.

General provisions

For the purposes of ~~the *Terrestrial Code* this chapter~~, *Tropilaelaps* infestation of ~~the~~ honey bees (species of the genus *Apis* species) *Apis mellifera* L. is caused by different species of *Tropilaelaps* mites (including the mites *Tropilaelaps clareae*, *T. koenigerum*, *T. thaii* and *T. mercedesae*). The mite is an ectoparasite of ~~bee~~ brood of honey bees of *Apis* species *Apis mellifera* L., *Apis laboriosa* and *Apis dorsata*, and cannot survive for periods of more than 7 21 days away from bee brood.

Early signs of infection infestation normally go unnoticed, but the growth in the mite population is rapid leading to high hive mortality. The infection infestation spreads by direct contact from adult honey bee to adult honey bee, and by the movement of infested honey bees and bee brood. The mite can also act as a *vector* for viruses of the honey bee.

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 9.5.2., Veterinary Authorities should require the conditions prescribed in this chapter relevant to the *Tropilaelaps* status of the honey bee population of the exporting country or zone.~~

When authorising import or transit of the commodities covered in the chapter, with the exception of those listed in Article 9.5.2., Veterinary Authorities should require the conditions prescribed in this chapter relevant to the *Tropilaelaps* spp. status of the honey bee population of the exporting country or zone.

Article 9.5.2.

Trade in Safe commodities

When authorising import or transit of the following *commodities*, *Veterinary Authorities* should not require any *Tropilaelaps* spp. related conditions, regardless of the *Tropilaelaps* spp. status of ~~the honey bee population of the exporting country or zone:~~

- 1) honey bee semen;
- 2) honey bee venom;
- 3) honey bee eggs;
- 4) royal jelly.
- 1) ~~honey bee semen, honey bee eggs and honey bee venom;~~
- 2) extracted honey, pollen, propolis, and royal jelly. for human consumption; and

3) processed beeswax (not in the form of honeycomb).

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 *Tropilaelaps* status of the honey bee population of the exporting country or zone.

Article 9.5.3.

Determination of the *Tropilaelaps* spp. status of a country or zone/compartement

The *Tropilaelaps* spp. status of a country or zone/compartement (under study) can only be determined after considering the following criteria:

- 1) a *risk assessment* has been conducted, identifying all potential factors for *Tropilaelaps* spp. occurrence and their historic perspective;
- 2) the presence of *Tropilaelaps* spp. infestation should be notifiable in the whole country or zone/compartement (under study) and all clinical signs suggestive of *Tropilaelaps* spp. infestation 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 *Tropilaelaps* spp. infestation;
- 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 domesticated *apiaries* in the country.

Article 9.5.4.

Country or zone/compartement (under study) free from *Tropilaelaps* spp.

1. Historically free status

A country or zone/compartement (under study) may be considered free from *Tropilaelaps* spp. the disease after conducting a *risk assessment* as referred to in Article 9.5.3. but without formally applying a specific *surveillance* programme if the country or zone/compartement (under study) complies with the provisions of Chapter 1.4.

2. Free status as a result of an eradication programme

A country or zone/compartement (under study) which does not meet the conditions of point 1 above may be considered free from *Tropilaelaps* spp. infestation after conducting a *risk assessment* as referred to in Article 9.5.3. 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/compartement (under study);
- b) the presence of *Tropilaelaps* spp. infestation is notifiable in the whole country or zone/compartement (under study), and any clinical cases suggestive of *Tropilaelaps* spp. infestation are subjected to field and laboratory investigations;
- c) for the 3 years following the last reported case of the presence of *Tropilaelaps* spp. infestation, 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/compartement (under study) to provide a confidence level of at least 95% of detecting *Tropilaelaps* spp. infestation—if at least 1% of the *apiaries* were infected infested at a within-*apiary* prevalence rate of at least 5% of the hives; such surveys may be targeted towards areas with a higher likelihood of *infestation*;
- 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 *apiaries* in the

country or ~~zone/compartment (under study)~~ to indicate that there has been no new cases; such surveys may be targeted towards areas with a higher likelihood of infestation disease;

- e) ~~(under study) either there is no wild or self-sustaining feral population of Apis species of the genus Apis A. mellifera, A. dorsata or A. laboriosa, or other possible host species 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 mite 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 9.5.5.

~~Recommendations for the importation of live queen honey bees, worker honey bees, and drones honey bees, and with associated larvae of honey bees, pupae of honey bees, and brood combs~~

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

- 1) the commodities bees come from an **apiaries** situated in a country or ~~zone/compartment (under study)~~ officially free from *Tropilaelaps* spp.; ~~infestation the apiary meets the conditions prescribed in Article 4.14.3.~~

OR

- 2) ~~In the case of in which the country or zone is not free from *Tropilaelaps* infestation, *Veterinary Authorities of importing countries* should only allow the importation of the shipment comprises only queen honey bees with attendant worker honey bees without associated brood combs and the honey bees should require that the honey bees meet the following conditions:~~

~~1a) come from an artificial broodless swarm with the caged queen; and~~

~~2b) caged queen and swarm have been treated with an effective veterinary medicinal product and kept isolated for 21 days from brood prior to the shipment; and~~

- ~~3c) were inspected by a representative of the *Veterinary Services* prior to the shipment and showed no evidence of the presence of the mites.~~

~~Article 9.5.6.~~

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

~~*Veterinary Authorities of importing countries* should require the presentation of an *international veterinary certificate* attesting that the bees have been held in isolation from brood and bees with access to brood, for a period of at least seven days.~~

Article 9.5.7~~6~~.

~~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/compartment (under study)~~ free from *Tropilaelaps* spp. infestation; or

- 2) contains no live honey bees or bee brood and has been held in a bee-proof environment away from contact with live honey bees for at least 7 21 days prior to shipment; or
- 3) has been treated to ensure the destruction of *Tropilaelaps* spp., in conformity with one of the following procedures; referred to in Chapter X.X. recommended by the OIE (under study).
 - a) heating to 50°C core temperature and holding at that temperature for 20 minutes; or
 - b) freezing at core temperature of -12°C or less for at least 24 48 hours once the core reached -20°C; or
 - c) fumigation with methyl bromide at a rate of 48 g per cubic metre at atmospheric pressure and at a temperature of 10-15°C for a period of 2 hours; or
 - d) irradiation with 350 Gy; or
 - e) by any procedure of equivalent efficacy recognised by the Veterinary Authority of the importing and exporting countries.

Article 9.5.87.

~~Recommendations for the importation of honey-bee collected pollen, beeswax (in the form of honeycomb), comb honey and propolis~~

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

- 1) comes from an apiariesy situated in a country or ~~zone/compartement~~ (under study) free from *Tropilaelaps* spp. infestation; or
- 2- contain no live honey bees or bee brood and has been held away from contact with live honey bees for at least 7 21 days prior to shipment; or
- 2) has been is strained honey through a filter of pore size no greater than 0.42 mm; or
- 3) ~~has~~ been treated to ensure the destruction of *Tropilaelaps* spp., in conformity with one of the following procedures; referred to in Chapter X.X. recommended by the OIE (under study).:
 - a) heating to 50°C core temperature and holding at that temperature for 20 minutes; or
 - b) freezing at core temperature of -12°C or less for at least 24 48 hours once the core reached -20°C; or
 - c) fumigation with methyl bromide at a rate of 48 g per cubic metre at atmospheric pressure and at a temperature of 10-15°C for a period of 2 hours; or
 - d) irradiation with 350 Gy; or;
 - d) by any procedure of equivalent efficacy recognised by the Veterinary Authority of the importing and exporting countries.

Article 9.5.8.

Recommendations for the importation of bee-collected pollen

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

- 1) comes from an apiariesy situated in a country or *zone* free from *Tropilaelaps* spp.; or
- 2) has been treated to ensure the destruction of Tropilaelaps spp., in conformity with one of the following

procedures:

- a) freezing at core temperature of -12°C or less for at least 24 hours; or
- b) irradiation with 350 Gy; or
- c) desiccation by freeze drying or equivalent; or
- d) by any procedure of equivalent efficacy recognised by the Veterinary Authority of the importing and exporting countries.

Article 9.5.9.

Recommendations for the importation of beeswax and propolis

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

- 1) come from an apiariesy situated in a country or zone free from *Tropilaelaps* spp.; or
- 2) are processed beeswax or processed propolis; or
- 3) have been treated to ensure the destruction of *Tropilaelaps* spp., in conformity with one of the following procedures:
 - a) freezing at core temperature of -12°C or less for at least 24 hours; or
 - b) fumigation with methyl bromide at a rate of 48 g per cubic metre at atmospheric pressure and at a temperature of 10-15°C for a period of 2 hours; or
 - c) irradiation with 350 Gy; or
 - d) desiccation by freeze drying or equivalent; or
 - e) by any procedure of equivalent efficacy recognised by the Veterinary Authority of the importing and exporting countries.