

TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

SEPTEMBER 2011 REPORT

CHAPTER 9.5.

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

Article 9.5.1.

General provisions

For the purposes of this chapter, *Tropilaelaps* infestation of the honey bee (*Apis* species) *Apis mellifera* L. is caused by different species of *Tropilaelaps* (including the mites *Tropilaelaps clareae*, *T. koenigerum*, *T. thaii* and *T. mercedesae*). The mite is an ectoparasite of brood 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* normally go unnoticed, but the growth in the mite population is rapid leading to high hive mortality. The *infection* spreads by direct contact from adult bee to adult bee, and by the movement of infested 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.

Article 9.5.2.

Trade in Safe commodities

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

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* status of a country or ~~zone/compartiment~~

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

1. a *risk assessment* has been conducted, identifying all potential factors for *Tropilaelaps* occurrence and their historic perspective;
2. *Tropilaelaps* infestation should be notifiable in the whole country or ~~zone/compartiment (under study)~~ and all clinical signs suggestive of *Tropilaelaps* 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* 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/compartiment (under study)~~ free from *Tropilaelaps* spp1. Historically free status

A country or ~~zone/compartiment (under study)~~ may be considered free from 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/compartiment (under study)~~ complies with the provisions of Chapter 1.4.

2. Free status as a result of an eradication programme

A country or ~~zone/compartiment (under study)~~ which does not meet the conditions of point 1 above may be considered free from *Tropilaelaps* 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/compartiment (under study)~~;
- b) *Tropilaelaps* infestation is notifiable in the whole country or ~~zone/compartiment (under study)~~, and any clinical cases suggestive of *Tropilaelaps* infestation are subjected to field and laboratory investigations;
- c) for the 3 years following the last reported *case* of *Tropilaelaps* infestation, 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/compartiment (under study)~~ to provide a confidence level of at least 95% of detecting *Tropilaelaps* infestation 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 a higher likelihood of infestation;

- d) to maintain free status, an annual survey supervised by the *Veterinary Authority*, with negative results, is carried out on a representative sample of *apiaries* in the country or ~~zone/compartiment (under study)~~ to indicate that there has been no new *cases*; such surveys may be targeted towards areas with a higher likelihood of *disease*;
- e) ~~(under study)~~ there is no self-sustaining feral population of *Apis* species *A. mellifera*, *A. dorsata* or *A. laboriosa*, or other possible host species in the country or ~~zone/compartiment (under study)~~;
- f) the importation of the *commodities* listed in this chapter into the country or ~~zone/compartiment (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 bees, ~~and~~ drones and with associated brood combs

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that the commodities bees come from an apiary situated in a country or ~~zone/compartiment (under study)~~ officially free from *Tropilaelaps* infestation the apiary meets the conditions prescribed in Article 4.14.3.

In the case of the country or zone is not free from *Tropilaelaps* infestation, *Veterinary Authorities* of *importing countries* should only allow the importation of queen honey bees with attendants worker bees without associated brood combs and should require that the bees meet the following conditions:

1. come from an artificial broodless swarm with the caged queen, and
2. 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
3. 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 come from a country or zone free from *Tropilaelaps* infestation or meet the following conditions:~~

- ~~1. come from an apiary which meets the conditions described in Article 4.14.5. and which has been regularly treated against *Tropilaelaps* infestation in the past two years prior to export with an effective acaricide product accepted by *Veterinary Authorities* of the exporting country~~
- ~~2. have been held in isolation from brood and bees with access to brood, for a period of at least 7 21 days.~~

Article 9.5.76.

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:

1. comes from a country or ~~zone/compartement (under study)~~ free from *Tropilaelaps* infestation; or
2. contains 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
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 for 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.

Article 9.5.78.

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 products:

1. come from a country or ~~zone/compartement (under study)~~ free from *Tropilaelaps* 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
3. have 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 for 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.