



PPR Expert Mission to Greece EU VET Initiative

24 - 25 July 2024

PAFF Committee, 20th September 2024



Terms of reference:

In response to PPR in Greece

Providing on-the-spot assistance

- *most suitable PPR control and eradication measures*
- *scientific, technical, managerial aspects*

Specific questions addressed:

- *What are the critical points and how to be addressed with the most immediate and urgent measures which need to be implemented to control the PPR epidemic?*
- *What are the measures to be taken by the competent authorities in Greece to mitigate the risk of PPR virus introduction into other territories and for early detection and quick response to eventual outbreak?*

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Places visited during the mission

Day 1. Arrival to Athens

Day 2.

- *Meeting with Central Competent Veterinary Authority and Local Veterinary Authority in Larisa*
- *Visit to non-affected sheep establishment within surveillance zone in Larisa*
- *Visit to first establishment infected in Larisa (ADIS/5)*

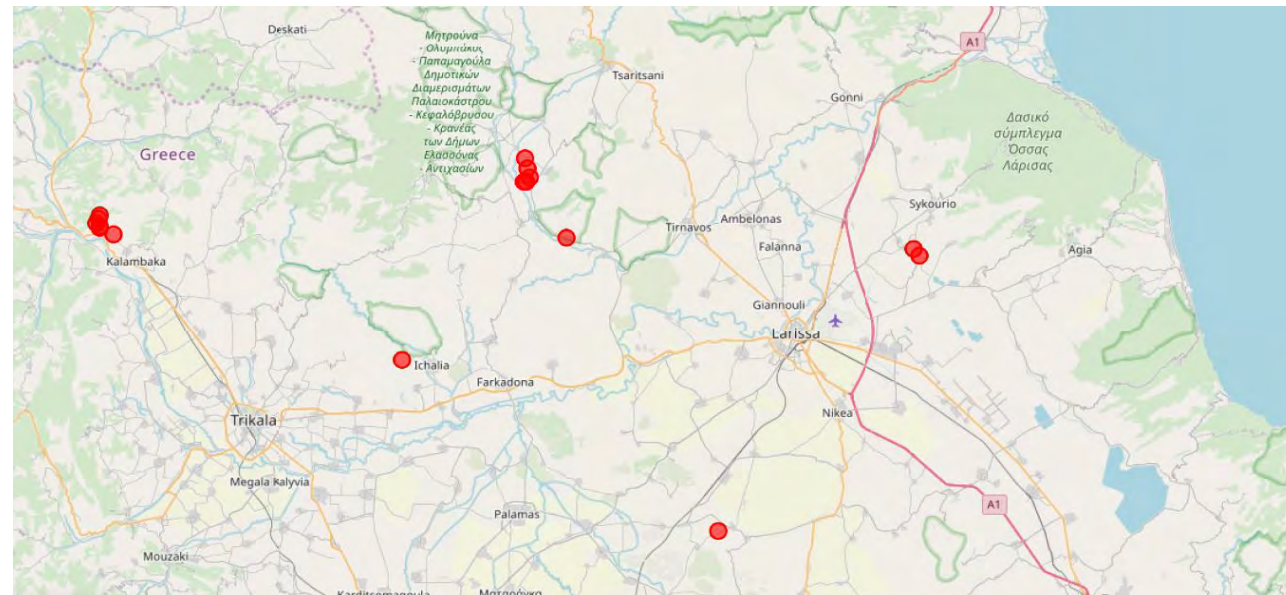
Day 3.

- *Final meeting with central competent veterinary authority*



Epidemiological background and situation by the time of the EuVET

- Till 11th July 2024 Greece had a free status for PPR and the diseases had never been recorded on the territory of the country.
- Between 11th July and the dates of the EUVET mission, a total of 15 outbreaks of PPR had been notified in Trikala and Larisa prefectures of Thessaly region in Greece.
- One suspicion in Kileler was reported during the mission and confirmed as PPR positive on 26th July.





Control measures (1)

- *All measures as defined in the EU legislation (Reg. 2020/687, and Dec. 2024/2014) have been strictly implemented.*
- *excellent measure in terms of outbreak management without any delays*
- *very strict instructions and clear documents and guidelines issued specifically for the purpose of PPR control*
- *Wide awareness campaign for PPR in place*
- *Total movement ban for small ruminants was imposed on the whole territory of Thessaly (restrictions imposed beyond the protection and surveillance zones and even beyond the further restricted zone as per Decision 2024/2014)*
- *Prohibition for movements of bovines was also imposed for Trikala and Larisa prefectures.*
- *Grazing - prohibited in the whole region.*



Control measures (2)

- *Police - involved and actively patrolling and controlling for any illegal animal movements.*
- *special controls in place all over Greece in farms where sheep had been already delivered or in process arriving from Romania (but also from other states) with strict surveillance to detect or rule out any infection*
- *Six official veterinarians in Trikala and 14 official vets in Larisa. Additional 100 – 110 veterinarians were appointed to support the activities in the affected prefectures*
- *Thirty to 40 teams performing clinical investigations and sampling (of suspected sheep and goats) on daily basis, in the established zones.*
- *The National Reference Laboratory (NRL) with the capacity to perform laboratory investigations for 100 animals per day. The national veterinary research laboratory in Thessaloniki has been appointed to provide support to the NRL. A third laboratory associated with the university of Thessaly, was in process of being trained for PPR laboratory diagnostic to further increase diagnostic capacity*

Visit 1 - The PPR free establishment

- *located in the surveillance zone around outbreaks 2024/5;*
- *a fenced, intensive family dairy farm with lacaune sheep;*
- *no grazing at the moment;*
- *the farmer and other staff were very well aware of the PPR situation since the start of the epidemic;*
- *active clinical surveillance performed;*
- *disinfection point at the entrance of the fence (no cleaning before the disinfection activities);*
- *wool sheering was already performed during Easter time and not considered as risk factor;*
- *no changing of clothes and shoes by staff when entering the stables where the animals are;*
- *shoes are disinfected at the entrance when entering and exiting the premises*
- *except the milk truck there are no other links with other establishments.*



Visit 2 - Outbreak 2024/5

- *the first farm to be notified as infected in Larisa;*
- *already depopulated with proper cleaning and disinfection completed;*
- *all sheep buried on the spot;*
- *very limited contact with external resources;*
- *the sheep were grazed on land surrounded by electric fences]*
- *direct or indirect contacts with other flocks could be possible at the fence or water pools;*
- *no introduced sheep recently;*
- *The private veterinarian was called two days after the appearance of the clinical signs. BT suspected at the beginning and PPR test was performed a little bit later giving time for exposure of the clinical signs and mortality in 9 animals out of 410;*
- *the intensive trade with animals in the area around is considered as source of the virus.*





Considerations and critical points (1)

- *The diagnosis PPR for the first outbreak confirmed with delay after the first clinical signs were detected (considered first as suspicion for BT)*
- *Outbreak 2024/5 (the first one in Ellassona) treated as a suspicion for BT first before testing and confirmation of PPR infection*
- *In Thessaly there are about 1.7 million small ruminants in about 8500 establishment and only in Larissa prefecture above 1 million small ruminants in 3500 establishments.*
- *The milk collection from different establishments is much intensified process and still in place during the EUVET visit.*

Considerations and critical points (2)

- *At this point there was no clear evidence of the real source of the epidemic in Greece. Epidemiological investigations for each of the outbreaks had not been completed by the time of the EuVET due to the huge workload.*
- *There are many traders and trading companies that could have contributed to disease spread to, within and out of Thessaly, and were under investigations.*
- *Animal movements, underreporting and/or delay in detection of PPR occurrence, biosecurity gaps on farms and particularly related to lack or poor cleaning and disinfection of trucks (the milk collection ones) in different establishments are high risk factors to be considered.*

Considerations and critical points (3)

- *The high density of establishments and susceptible livestock*
- *the common grazing, proximity of grazing areas,*
- *as well as the very intensive animal movements before the restrictions imposed*

may have contributed to further spread of the disease (animals still in incubation and not showing clinical signs) with more undetected outbreak in Thessaly and beyond.

- ***Highest priority:** identify properly the really infected area(s) as soon as possible and take all necessary actions to prevent the diseases of escaping to new establishments and territories.*

Conclusions and recommendations (1)

- *The Greek veterinary authorities took excellent measures in the field to control the disease*
 - *First ever introduction of PPR in Greece (in Trikala and Larisa not previously considered as high risk areas) – therefore unexpected and exceptional situation*
 - *Sheep showed clearer clinical symptoms and higher mortality*
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- *The main difficulty and challenge for eradication:*
 - ✓ *the delay in detection of the first outbreaks,*
 - ✓ *the high density and close proximity of farms and susceptible animals and*
 - ✓ *common grazing sites.*

Conclusions and recommendations (2)

- *The surveillance carried out under the TAD and THRACE programmes, as well as additional investigation by the competent veterinary authority show that by the time of the EuVET there was no evidence for PPR in the areas under the scope of these programmes*
- *Animal movements ban is imposed on the whole territory of Thessaly (measures stricter and beyond the requirements of the EU legislation) and we strongly recommend to maintain this measure for the time being and even expand the zone. The focus should be on preventing the disease from spreading geographically.*
- *The restriction zone around each of the outbreaks detected should be established based on a risk assessment, with appropriate size and prolongation of the measures imposed till there is clear evidence for absence of virus circulation based on documented clinical examinations and laboratory surveillance. Sharing grazing sites must be strictly prevented.*

Conclusions and recommendations (3)

- *All previous (from 1st of June) movements of susceptible animals outside the established restrictions zones must be traced in priority and thoroughly investigated to rule out any possibility for or detect eventual other outbreak(s) as soon as possible*
- *Stamping out, combined with standstill and strict movement control should remain the basic method for control and eradication of PPR, at least for the time being. For now the period between confirmation of the disease and completion of killing and disposal activities by the Greek authorities is really very short and must be kept in the same timeline.*
- *Detailed epidemiological surveys should be finalized, as soon as possible, to investigate the time and source of infection and modes of transmission for every single outbreak*

Conclusions and recommendations (4)

- *In the restricted zone clinical surveillance must be maintained. Sampling and testing of animals showing clinical signs must be priority. Swabs of ocular and nasal discharges are suitable samples. In establishments with no clinical signs: not to collect samples, but to have them visited and examined again (preferably 7 days later)*
- *The coordination and cooperation with EURL should continue.*
- *Only samples meaningful for investigation should be processed by the NRL: ocular and/or nasal swabs and tissues (not EDTA blood as there is only limited presence of PPRV in blood)*
- *Clinical surveillance and passive reporting by farmers and private veterinarians is of the greatest importance for recognition of the disease and should be maintained and further enforced on the whole territory of Greece. Awareness effort should be continued and reinforced*

Conclusions and recommendations (5)

- *Biosecurity measures implemented in the establishments with small ruminants have to be reinforced and verified regularly by the competent veterinary authorities. In particular, the management aspects ("software" side) of biosecurity needs to be strengthened. Enforced awareness!*
- *Milk collection: all vehicles entering or leaving establishments across wider restriction zones should be properly cleaned and disinfected to avoid spreading of the disease.*
- *Special attention must be paid on trucks of dealers/transporters with strictly controlled cleaning and disinfection before and after every delivery.*
- *In any case, it should be assumed that the fight against PPR will be a lengthy process that may take several months. Therefore, the local and central governmental institutions responsible for disease control (e.g. the competent veterinary authorities, laboratories) should be provided with sufficient financial and human resources.*



The EU-VET team would like to thank all colleagues from Greece for their great support and help!

The working atmosphere during the mission was excellent. The colleagues from the Greece gave all their support and assistance to facilitate a fruitful mission in a very transparent manner.

Special thanks to Mary Gianniou for her greatest support and dedication!