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MODULAR TRAINING

Diagnostic techniques for CBPP / CCPP

Scientific coordinator:
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1 week



Delivered in French or in English

Contagious bovine pleuropneumonia (CBPP) is included in the list drawn up by the World Organisation for Animal Health (WOAH, founded as OIE) gathering diseases with a major impact on livestock and representing a major constraint to international trade. CBPP is caused by a mycoplasma, *Mycoplasma mycoides* subsp. *mycoides*

This disease is characterized by respiratory symptoms and pleurisy and pneumonia lesions. These lesions can progress to a chronic stage and animals bearing them, while hardly detectable by clinical observation, are a source of reinfection for healthy herds.

Until recently, the fight against CBPP relied on mass vaccination campaigns, often associated with those directed against rinderpest. These campaigns are costly, due to the need for annual booster vaccinations. As a result, the vaccination effort is difficult to maintain in Africa and the number of outbreaks is increasing.

The use of laboratory diagnosis is essential, both to confirm the suspicion of CBPP and to measure the impact of the disease on livestock and, thus, to be able to develop appropriate control strategies. The laboratory diagnosis does not present major technical difficulties but requires practical experience for it to be performed correctly. The same is true for contagious caprine pleuropneumonia (CCPP).



Training objectives

This technical training course can be developed for CBPP and/or CCPP.

At the end of the training, participants will be able to:

- perform serological analyses of CBPP / CCPP by cELISA, learn the basics of quality control in this field and know how to interpret the results;
- isolate the agent of CBPP / CCPP
- perform the titration of a CBPP vaccine;
- perform classical and/or real time PCR techniques for rapid diagnosis of CBPP / CCPP

Other objectives such as quality control of vaccines, assessment of antibiotic sensitivity of strains by MIC evaluation, or molecular typing of strains may be proposed upon request



Audience

This course is open to persons directly involved in the diagnosis of CBPP / CCPP (veterinarians, laboratory technicians).

Candidates must have a good command of either French or English.

Upon request, sessions relocated within partner institutions can be organized if a sufficient number of participants are present (at least 5).

The dates and duration of the training can also be adapted as needed.



Program

The program combines lectures with practical training and demonstrations to enable participants to become familiar with serological, bacteriological and molecular techniques

- Theory 10 hours
- Practice 20 hours



Training costs

- Training cost at CIRAD in Montpellier (France) : €1,500
- Travelling training by invitation : contact us
- Accommodation : allow a minimum of €120 / day

If needed, and especially when several successive training modules are involved, a customized estimate can be established upon request.



Application procedure

Applications, including a detailed CV, a letter of motivation and details of the organisation managing the scholarship, should be sent by e-mail to prisme.formation@cirad.fr no later than one month before the starting date (two months if the stay is subject to obtaining a visa).



CIRAD cannot provide study grants. If you wish to request a grant, submit an application as soon as possible to national authorities in charge of livestock and/or scholarships; Cooperation and Cultural Action Services (SCAC) of your local French Embassy; the embassies of other countries; international organizations (FAO, UNDP, EU, IAEA, IDB ...); development projects or NGOs.

