DOURINE SURVEILLANCE IN THE KWAZULU-NATAL RURAL HORSE POPULATION

Dourine is a chronic contagious disease of horses, donkeys and mules that results in either an asymptomatic or interstitial/oedematous form, either of which can develop neurological manifestations. The responsible organism is a protozoan parasite, *Trypanosoma equiperdum*, which is the only trypanosomosis that is not transmitted by arthropod vector and is a truly venereal disease. In South Africa Dourine is a Controlled Disease under the Animal Diseases Act 35 of 1984.

First described in about 400 AD, making Dourine one of the oldest recognized equine diseases, it achieved global distribution during World War I but has subsequently been eradicated from North America and most of Europe. It is still endemic in Africa and Asia and still found in the Middle East, South America and Eastern Europe.

Over the last eleven years (2005 to 2015) there have been a total of 105 confirmed seropositive Dourine cases in South Africa, 40% of these cases were reported in the Eastern Cape Province, 19% in KwaZulu-Natal, 16% in the Northern Cape Province, 11% in Mpumalanga and 7% in Gauteng. The remaining 14% was distributed among the remaining three provinces (North West Province, Western Cape Province and the Free State).

When looking at the same results over the last five years (2011 to 2015), 30 cases were reported, the highest prevalence was found in KwaZulu-Natal (33%). A decrease in the number of positive cases being reported over the last five years is either a reflection of a decrease in prevalence of Dourine in South Africa or a decrease in Dourine monitoring and surveillance.

The intention of this Veterinary Services project, is to determine the prevalence of Compliment Fixation Test (CFT) seropositive horses in the communal/rural populations of horses in KwaZulu-Natal and thus determine if further investigations and/or control measures need to be considered.

State Veterinarians, working in conjunction with the Coastal Horse Care Unit, will collect samples throughout the year at the Rural Outreach clinics and the tests will be done at Allerton Provincial Veterinary Laboratory.

While at these Outreach clinics, Veterinary Services will take the opportunity to educate owners about various horse diseases and conditions as well as treat any sick or injured horses that are brought to the clinic.