



WDA EWDA

LYON 2012



# Joint 61<sup>st</sup> WDA/10<sup>th</sup> Biennial EWDA CONFERENCE “convergence in wildlife health”

## Lyon 23 - 27 July 2012

### Proceedings

©edited by Helena PEREIRA, WildTech research engineer of Lyon  
Crédit photo : R. Cavigneaux, DVM, Vandoeuvre (France)  
[http://www.regiscavignaux.com/index\\_eng.php](http://www.regiscavignaux.com/index_eng.php)



## [344] UTILITY OF BLOTTING PAPER FOR SEROLOGICAL TESTS TO PERFORM MONITORING PROGRAMS FOR EUROPEAN BROWN HARE SYNDROME (EBHS)

Mario Chiari<sup>1,4</sup>, Emanuela Gioia<sup>2</sup>, Nicola Ferrari<sup>3</sup>, Lorenzo Capucci<sup>1</sup> and Antonio Lavazza<sup>1</sup>

<sup>1</sup>OIE Reference Laboratory for Rabbit Haemorrhagic Disease, Istituto Zooprofilattico Sperimentale della Lombardia ed Emilia Romagna "Bruno Ubertini", Brescia, Italy; <sup>2</sup>Veterinary Practitioner, Piacenza, Italy; <sup>3</sup> Faculty of Veterinary Medicine of Milan, Italy; <sup>4</sup> Email:mario.chiari@izsler.it

Since mid '80 the European brown hare (*Lepus europeus*) populations have been progressively declining due to several causes, including the occurrence of EBHS. After the first outbreaks in North Italy in the '90, the periodical EBHS cases imposed the adoption of an articulate monitoring plan of the different hare populations, including those from protected areas and the hunting territory. In addition to the examination of dead animals for viral detection, such monitoring activity takes advantage from serological survey i.e. by checking the presence of antibodies to EBHSV. Since different types of blood sampling may be adopted according to each situation, from 2005 to 2012, we planned to compare the serological titres obtained by testing with cELISA: a) the "classical" serum b) samples of blood dried onto blotting paper and c) bloody fluid from the heart cavities. The major aim was to establish the utility of each sampling method for verifying hares' health status and the possibility to get data from low density areas, as hunting ones. We analysed the following samples: a) + b = 305 animals; b) + c) = 182 animals; a) + c) = 95 animals. Even if blotting paper and cardiac blood slightly underestimate the EBHSV antibody titres, both these "alternative" sampling methods may be useful for field studies. Moreover, the slightly underestimates of antibody titres do not prevent to correctly interpret the sero-epidemiological results with regard to the understanding of spatial/time exposure of the population to EBHS and the ability of single hares to resist the EBHSV infection.

