SESSIONE 2

Le infezioni trasmesse da zecche

Mercoledì 12 ottobre 2005, ore 09.00 - 13.00, Sala E

S2.1

**IXODES RICINUS: CHARACTERISTICS, ECOTOLOGY, AND DYNAMICS OF THE POPULATIONS IN CONNECTION WITH CLIMATIC CHANGES**

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Ticks within the *Ixodes ricinus/I. persulcatus* complex comprise the most important vectors for human diseases in the northern hemisphere. Tick borne encephalitis (TBE) and Lyme borreliosis (LB) are for sure the most relevant diseases, but additional tick borne diseases like rickettsioses, anaplasmosis, or babesiosis increasingly gain research- and public awareness. The hard tick *I. ricinus* is the most abundant tick species in Central Europe. This tick has a complex life cycle the knowledge of which is an important prerequisite to understand ecology and epidemiology of this tick as well as of *I. ricinus* borne diseases. Moreover, such knowledge is the base to develop and establish preventive strategies. In recent years, global warming - leading to warmer winters and thus possibly better survival of *I. ricinus* - is discussed as a crucial factor that might promote higher local abundance of *I. ricinus* as well as expansion of this tick to new regions. Based on this, a higher incidence of tick borne diseases is assumed. However, the present data base for such predictions is still poor. An overview on what is known about this ticks’ anatomy, life cycle, and required environmental conditions will be given with special respect to existent data regarding the development of local and European tick populations. Furthermore, the mode of pathogen transmission, how to detach a tick from humans, and how to follow-up a tick bite will be discussed.