



## P 2 Mapping *Ixodes ricinus* in Switzerland: A first step towards the assessment of tick-borne infections

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The main purpose of this paper is to present the currently known distribution of *Ixodes ricinus* in Switzerland, the most important vector tick. All observations on the presence of *I. ricinus* in Switzerland were gathered 1925 to 2010. The main information sources were scientific collections or publications compiled by the Laboratory of Parasitology, University of Neuchâtel. Most observations were done from 1965 to 1975 and in 2010. *I. ricinus* was found in all biogeographical regions of Switzerland. Currently, *I. ricinus* is observed only below 1500 m altitude. Observations are less abundant in the Alps compared to the Swiss Plateau. Obtained data on *I. ricinus* show a seasonally dependent questing pattern (March to October).

Further field investigations in a more systematic way are needed to obtain more accurate data on *I. ricinus* geographical and altitudinal distribution. Another focus of these complementary investigations is to obtain information on the distribution of ticks infected with *Borrelia burgdorferi* sensu lato, TBE virus, *Babesia* spp., *Anaplasma* spp., and *Rickettsia* spp.

In conclusion, *I. ricinus* is expected to be quite common in Switzerland. Lyme borreliosis occurs in most parts of Switzerland as confirmed by sentinel surveillance data from 2008 and 2009. TBE, although focused in endemic areas, might spread to other parts of Switzerland as observed during the last decade.

One of the goals of the Federal Office of Public Health is to collaborate with other federal offices and institutions to widen the level of knowledge on ticks and tick-borne pathogens and their potential effects on human and animal health.