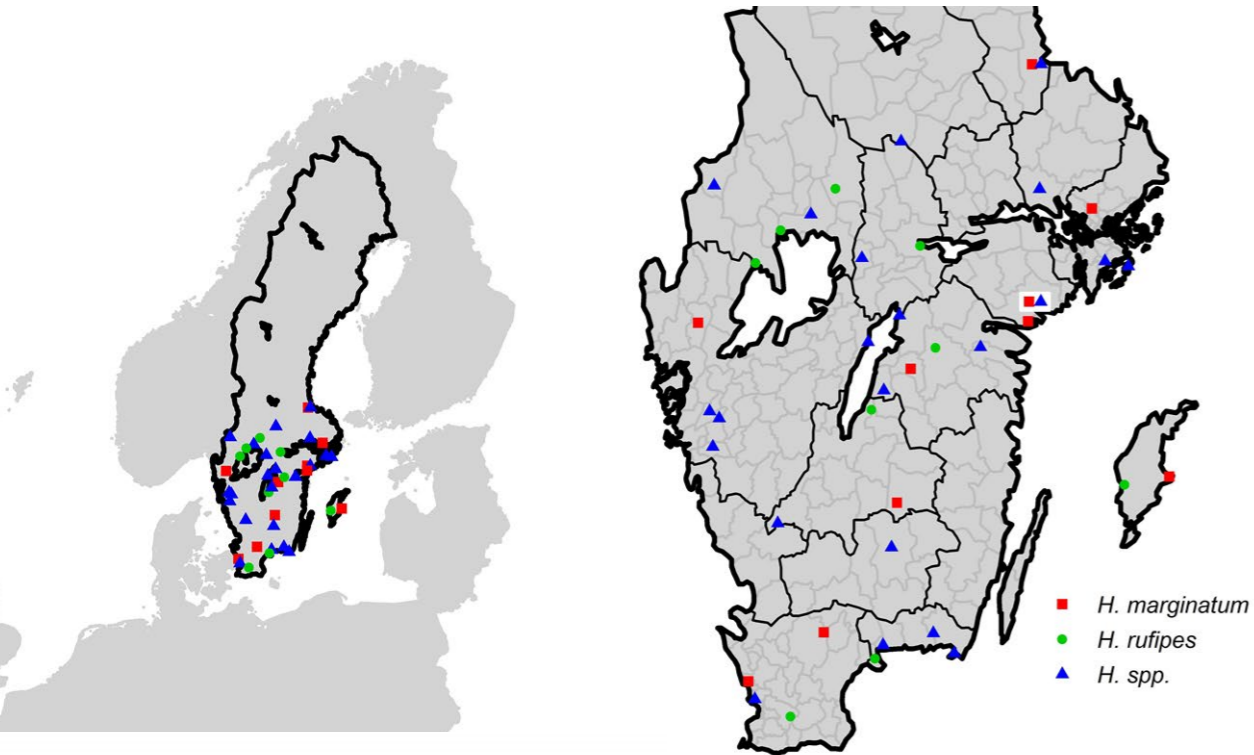


First records of adult *Hyalomma* ticks in Sweden



Figures: Top: *Hyalomma* ticks found in Sweden from July 2018 to January 2019. *H.spp.* means either *H. marginatum* or *H. rufipes*, based on photographs.

Bottom: *Hyalomma marginatum*, illustration by Disa Eklöf, National Veterinary Institute



Our citizen science study yielded 41 specimens of adult *Hyalomma* ticks, which had been found on horses, cattle or humans. *Hyalomma* ticks had previously only rarely been found in Sweden and then only at immature stages.

The rapidly changing climate in northern Europe seems to permit these tick species now to develop to adulthood.

Molecular testing of 20 ticks for Crimean-Congo haemorrhagic fever virus and for piroplasms (*Babesia* spp. and *Theileria* spp.) proved negative; but 12 ticks tested positive for **rickettsiae**.

We see a need to revise the risk maps for the potential geographic occurrence of ticks and tick-borne infections in Sweden and the neighboring countries.