

## **Abstract (in English)**

Hyaluronidases are an important group of enzymes responsible for cleaving hyaluronic acid, which is a major component of the extracellular matrix of vertebrates. In bloodsucking arthropods these enzymes are frequently present in saliva. Salivary hyaluronidases cleave the skin of the host, enlarge the feeding lesion and help to acquire the blood meal. In addition, resulting fragments of extracellular matrix may modulate local immune response of the host and positively affect transmission of vector-borne diseases.

Here, we study hyaluronidase activity in hard tick *Ixodes ricinus* (Acari: Ixodidae) and four genera of tabanid flies (Diptera: Tabanidae). No activity was found in tick salivary glands, on the other hand, high activity was found in salivary glands of all tabanid species tested. Hyaluronidases of tabanid flies cleave hyaluronan as well as chondroitin sulphate; enzymes of different species vary somehow in their molecular weight, pH optimum and sensitivity to reducing conditions.