Fauna and populations of stone debris spiders of Beringia (Northeast Siberia and Northwest America)

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Stony debris ecosystems are widely spread in the northeastern Asian extremity. Morphologically and geologically such ecosystems can be divided to many types. Spiders and their communities associated with stony debris have been studied in upper Kolyma and Ola rivers flows, Sea of Okhotsk coastal parts, and Chukotka. Material from the Yukon Territory stony debris spiders has also been incorporated. Many of species associated with stony biotopes are widespread in NE Siberia and inhabit tundra and taiga zones and different altitudinal belts, some are restricted to taiga zone only, and few to tundra. Most widespread and numerous stony debris spiders are Acantholycosa subsolana, Aculepeira carbonarioides and Lathys alberta. Most common dominants of the forest belt in taiga zone are Theridion sibiricum and L. alberta. Those of the mountain tundra belt are A. subsolana and A. carbonarioides. Some species were found in 1–2 sites of very limited size (Hybauchenidium holmi, Theridion thaleri, Chalcoscirtus carbonarius, Lepthyphantes epigynatus).

Short sketches on geographic and spatial distribution of lithobiont and lithophilous spider species are given. Species composition of the Yukon Territory rock debris spiders is similar to that of NE Siberia. While both differ greatly from that of Central European stony debris ecosystems. European and Beringian faunas have only two species in common.