



Soil ameriolation by ant in forest steppe of Mongolia

S. Kawaguchi and Y. Abe

Laboratory of Soil Biology and Biochemistry, The Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, sadaokawaguchi@wing.ocn.ne.jp

Ant is known as a garbage scavenger on the floor and a bio-controller of moth's larvae in Mongolian forest. Wood ant, typical in a boreal forest, makes a rather large mound composed of coniferous litter and subsoil lifted up by ant. Ant mound, representative of a figured landscape in a boreal forest, is non-vegetative, rather higher temperature and lower moisture. These parameters and ant foraging activity would affect the physico-chemical, microbial properties and hydrolase activity of ant mound. The ant microhabitat formed patchily in the forest steppe is proved to be a hot spot of nitrogen and phosphorous transformation in soil system, and promote the herbaceous succession.