

Land Slide Dam Deposits in the Ojigahata area, Northern Part of Suzuka Mountains

Yuji Abe[1]; Miwa Abe[1]

[1] none

A weak stratum that consisted of the unconsolidated sediments was discovered in the bank protection work done, in the right bank of the Inukami River in Ojigahata (Taga Town, Shiga Prefecture, Japan) in December 2007. This stratum is composed mainly of fine-grained sediments, can be traced horizontally well, and ranges a few meters or more of thickness by conservative estimate. The Inukami River is mountain stream that flows on the ravine. So, the present state of depositional setting doesn't correspond to facies of the stratum. We observed sedimentary facies and analyzed plant macrofossils, to clarify the character of this stratum. In addition, we investigated geomorphology. The research isn't still enough. So, We reports reconnaissance here. This stratum crops out at the riverbed of the Inukami River for about 500 meters length in the Ojigahata. It consists of silt, fine-grained sand(silty) or clay, and develops parallel lamination in some horizons. Thickness of the bed is almost constant in each bed. And there is little change in facis. Moreover, sorting and horizontal continuity of the each bed is well, within the range that can be observed in detail (scores meters width). Laminated bed of which concentrating the plant fragments found in the stratum. In this bed, the plant macrofossils (leaf and seed) and the insect fossils are included. Moreover, wood fragments and roots are scattered in the stratum. These facies shows the sediments have been laid down in still water region (comparatively shallow). At the offlying point from distribution of the stratum (downstream of the Inukami River), there is the landform on the mountain slopes related to occurrence of landslide. It changes from gentle valley to a ligulate relief. And the talus deposits was observed to reach the riverbed by the ground surveys.

The occurrence of suddenly event, such as dam up the river by landslide, or collapse, it forms that still water region on ravine ground of the mountain rapids. On the basis of the above results, it seems to that the process is as follows. The landslide dammed up the Inukami River, and formed the dam lake. And thus, the lacustrine sediment was deposited on the dam lake. These lacustrine sediments yields plant macrofossils assemblage consisted of 10 taxa of wood and about 20 taxa of herb. What these lacustrine sediments are including the fragments of charcoal and the buckwheat indicates that it was deposited after historic age. The constitution of plant macrofossils assemblage show comparatively local environmental paleovegetation. This assemblage is including the members in the forest, i.e., *Patrinia villosa*, *Stachyurus praecox*, *Phellodendron amurense*, *Weigela hortensis* and *Carpinus tschonoskii* and in a human habitat, i.e., *Chenopodium album*, *Oxalis corniculata*, *Setaria* sp. and *Humulus japonica*. It is unusual to lack the underwater plants and the wetland plants in spite of the lacustrine sediments.