Identification of Baskets and Bundles of their Materials from the Shimo-yakebe Site, Tokyo Using the Plant Opal Phytolith Analysis

YONEDA Kyoko and SASAKI Yuka

Baskets and bundles of their materials of the middle to latest Jomon periods were recovered at the Shimo-yakebe site, Tokyo. A result of material identification of those baskets showed that they were made of culms of subfam. Bambusoideae, but more minute identification was difficult with the anatomical observation. We succeeded to detect to identify a basket and two bundles of basket materials by observing plant opals formed in the graminaceous leaves using the plant opal phytolith analysis. We found plant opals of Pleioblatus sect. Nezasa or Sasa in some of the materials. Sediments of the river where the baskets were recovered yielded plant opals of Sasa. This indicated that Sasa grew near the site and could be use for basket weaving. Thus the plant opal phytolith analysis can be an effective tool to indentify basket materials.

Key words: Bambusoideae, baskets materials, motor cell phytoliths, plant opal phytolith analysis, late Jomon period