Thus far, plant use during the Incipient Jomon period has been discussed in relation to the beginning of pottery use. This is because initial pottery-making is thought to have enabled the use of a number of vegetable foods found in cool to temperate, deciduous broadleaf forests, such as nuts and acorns that require boiling to remove toxins before consumption. However, clarifying “what kind of foods were actually processed or cooked in Incipient Jomon potteries” is one of the most important research topics.

In 2012, charred acorns (Quercus subgen. Lepidobalanus) and bulbs of wild onion (Allium sp.) from the Incipient Jomon period were excavated from the Ojiyama Site, and directly dated to 13,400 cal BP. These discoveries indicate that people in the southern part of Kyushu Island already utilized these types of plant foods.

In addition, in order to examine actual usage of the Ryutaimon pottery and to estimate its relationship with plant foods, carbon and nitrogen stable isotope values and C/N ratios of these plant remains and charred materials attached to the inside of Ryutaimon pottery from the Ojiyama Site (southern Kyushu Island) and Sankakuyama Site (Tanega-shima Island) were analyzed.

Stable isotope values seem to show that Ryutaimon pottery from the Ojiyama Sites was used not only for boiling plants (especially acorns), but also for boiling remains of terrestrial mammals. The charred materials on potteries might be residue of a mixed “stew” of plant and animal foods. In the case of the Sankakuyama Site, stable isotope values were related more closely to marine products. It is likely that Ryutaimon pottery on southern Kyushu Island was used as a cooking tool for boiling a wide variety of foodstuffs.

Key words: Incipient Jomon, charred material on pottery, stable isotope analysis, radiocarbon dating, plant use