AMS Radiocarbon Ages and Calibrated Ages of the Yakemachi-type pottery

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We measured more than 10 samples of AMS radiocarbon ages of the potteries in the Jomon periods. Samples are charred-carbonaceous samples remained on the surface of deep bowls made in the Middle Jomon period. The purpose of this study is to clarify radiocarbon ages and calibrated ages of the Middle Jomon stages in Kantou region, and Tyubu region. The samples were scraped from the fragments of the deep bowls whose ceramic group were well known by archaeological study, such as the Aramaki-type, the Yakemachi-type, the Kasori-E1 type.

The powdery carbon samples were treated with HCl and NaOH solutions. Samples were measured by AMS (Accelerator Mass Spectrometry) at the Beta-analistic. Isotopic fractionation was corrected by the \( \delta^{13}C \) value. Radiocarbon age subtracted from 1950 sometimes substitutes for calendar age, but it is not strictly true. Radiocarbon age should be converted to calendar year with the 'calibration curve': an empirical equation established by radiocarbon dating of tree-ring samples whose calendar age were known. In comparison of the Jomon culture with some other prehistoric culture in the world, it is required to indicate calendar age during which the Jomon pottery had been used. In this study, we reported the calibrated radiocarbon ages of the Aramaki-type, and Yakemachi-type pottery. The result of calibrated radiocarbon ages shows about the Aramaki-type pottery, as old type of the Yakemachi pottery, period in Tyubu region is roughly from 3100 to 3090 [cal BC]. The result of calibrated radiocarbon ages shows about the Yakemachi-type pottery, as typical the Yakemachi pottery, period in Tyubu region is roughly from 3100 to 2900 [cal BC] Time span of the Yakemachi type, as series from the Aramaki-type to the Yakemachi-type pottery, on the middle Jomon period, has estimated about 200 years.