Early Agriculture in Korea Reconstructed by Millet Impressions on the Chulmun Potteries

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Previously the cultivation of plants in the Jomon period was not entirely accepted, but when contemporary research results are examined, apart from the actual scale and type of cultivation, it now appears to be safely confirmed that agriculture was practiced in this period. According to the empirical research results, the plants grown in the Jomon period were Japanese barnyard millet and several varieties of beans such as soy or adzuki, which originated in Japan, not crops usually included in the farming theories presented for the Jomon period, which have been influenced by theories hypothesizing the East Asian evergreen forest culture advocated by geographists and agricultural scientists. In view of the evidence, it may be claimed that the Jomon culture was not just limited to a hunter-gatherer lifestyle, but a culture with diverse living strategies incorporating plant cultivation; it has certain aspects in common with the Neolithic culture of the Korean Peninsula.

Based on the impression replica investigations, the main purpose of this paper is to verify the origins and spread of domesticated plants in the Neolithic age in the southern part of the Korean Peninsula. It also examines common traits shared by both regions concerning the acceptance of domesticated plants, and whether Asian continental grains were spread over the strait in the Jomon period, before considering the nature of any interchange between both regions on either side of the strait, which makes up the background to this spread.

The impressions of common and foxtail millet discovered from the Neolithic age sites located in the southeastern part of the Korean Peninsula, including the Dongsam-dong Shell-Midden, were found to be 1,000 to 1,500 years older than the dating established by the previous evidence of carbonized grains, thus overturning the earlier hypothesis concerning the system of spread and acceptance of the North China-style of millet agriculture. It was not spread as part of an agricultural package accompanied by human migration due to a cooling climate; it is presumed to be rather like a chain-reaction of events and due to the spread and proliferation of grain agriculture and related techniques. It is possible to consider that although a hunter-gatherer economy was the main subsistence of this region, the millet cultivation was naturally accepted as a part of subsistence strategy, and foxtail and common millets were locally developed as foodstuffs that can be stored.

Presently, there is no evidence supporting the spread of this millet agriculture to the Japanese Islands. This means that the interchange between both regions was mainly made by interaction among fishing communities; it was not made by the migration of people or groups that used pottery. In both regions the spread of farming through migration can be found in and after the Bronze Age (Yayoi period).

Key words: South Korea, Chulmun pottery, Neolithic age, early agriculture, foxtail millet, common millet, North China-style millet agriculture