Fossil Cryogenic Structures in the Terrace Deposit of the Oship River, Samchok, Korea

Seong Gil Choi

Department of Geography, Kongju National Teachers University, Kongju, Korea

In the deposits of the tributary terrace of Kosa-ri area, there appear fossil cryogenic structures (platy structures and silt caps) formed under periglacial environments during the late glacial period. The characteristics of terrace sediments and the stratigraphy with respect to the main-stream terrace show that the tributary terrace was also formed during the last glacial period. The fossil periglacial cryogenic structure seems to serve as a valuable index for terrace dating in Korea, where materials for the dating of river terraces are scarce.

The Distribution of Cryophilous Flora and Past Environment in the Korean Peninsula

Woo Seok Kong

Department of Geography, Chongju University, Chonju, Korea

Most of the artic-alpine and alpine plants in East Asia are thought to have evolved from a montane flora originally established in the high mountains of central Asia (and in some cases, further afield) since the Miocene, but mainly during the Pleistocene. These plants repeatedly advanced downslope and southward as the climate deteriorated, notably during the Pleistocene, but retreated back upslope and northward during the alternate phases of climatic amelioration. The absence of major topographic barriers, and of extensive glaciation, coupled with the presence of a north-south orientation in the mountain ranges of both East Asia and Korea, facilitated the dispersal of arctic-alphine and alpine plants southward from the circumpolar area, possibly through the Maritime Territory of the USSR, and especially along the Sikhote-Alin Mountain Range, consequently giving rise to the rich arctic-alphine and alpine flora in Korea. This migration was also aided by the lowering of sea-level during the glacial phases of the Pleistocene, especially in respect of the areas now covered by the West Sea (Yellow Sea), and the Korean Straits between Korea and Japan.

Further, in repect of the processes of arctic-alpine and alpine species migration in the past, the Korean peninsula seems to have served as one of the major refugia for these species during both the glacial and interglacial periods, because of its easy access to the circumpolar area of East Asia, and the availability of its diverse environments and habitats ranging from coastal