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Taxonomic status of the genus *Cuora* (Testudines: Geoemydidae) found from the Upper Pleistocene of the Central Ryukyus, Japan, with its biogeographical implications

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**PS-4 Taxonomic status of the genus *Cuora* (Testudines: Geoemydidae) found from the Upper Pleistocene of the Central Ryukyus, Japan, with its biogeographical implications**

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The Upper Pleistocene of Kumejima and Okinawajima Islands of the Okinawa Group, the Ryukyu Archipelago, have yielded a number of terrestrial turtle fossils referred to the genus *Cuora*. This genus consists of ten extant species distributed from the eastern Eurasia to Ishigakijima and Iriomotejima Islands of the Yaeyama Group. It also includes three extinct species found from the Middle and the Upper Pleistocene of Japan Main Islands, and the Early Pleistocene and the Upper Miocene of China. The turtle fossils from the Okinawa Group have been considered to be different from *C. galbinifrons* occurring in southern China, as well as from *C. flavomarginata* from the Southern Ryukyus, but their taxonomic status remained unknown to the present. In this study, we compared a set of fossils representing an individual found from Bise in the northern part of Okinawajima Island with all congeneric species to elucidate its taxonomic status. The Bise turtle shares all of the following four character states only with *C. aurocapitata* living in eastern China: 1, anterodorsal portion of the iliac blade as long as its posterodorsal portion; 2, shallow long and wide depression along ventrolateral margin of posterior lobe of the plastron; 3, plastral lip covered by the femoral scute, very thickened; 4, a shallow but obvious wide concavity as those in male individuals of this and some congeneric species. However, it differs from the latter in having very shallow and narrow medial anal notch. These character states strongly suggest that the Bise turtle belongs to an undescribed species close to *C. aurocapitata*. Some turtle fossils found from the southern part of Okinawajima Island and those from Iejima Island, which had been tentatively identified as *G. japonica*, an extant endemic geoemydid turtle of the Okinawa Group, appear to be actually identical to this undescribed species in having some of the above four character states. In addition, it is highly likely that the fossils from Kumejima Island and congeneric fossils recently discovered from Tokunoshima Island of the Amami Group are identical or very close to this extinct turtle. These results indicate that an undescribed species of the genus *Cuora* had been widely distributed in the Pleistocene of the Central Ryukyus, but went extinct abruptly around the end of the Pleistocene.