

INTRODUCTION

The Late Neogene sediments of terrestrial origin are generally distributed in the inland regions of Central Honshu. They have been known to contain plant megafossils by various authors through their geological investigations. However, a few full descriptions have been given for the fossil assemblages, except those by Miki (1941), Tanai (1961), and Suzuki (1970). The detailed floristic sequence in Central Honshu during the Late Neogene has not been yet established, although a general floristic changes of the Neogene were included in Tanai's (1961) comprehensive study throughout whole Japan.

As already stated by Tanai (1967, 1972), Late Neogene vegetation of Japan became to show a modern aspect in the fossil composition and components, differing distinctly from those of Early Miocene. Late Neogene floras of Japan are composed predominantly of the temperate vegetation elements, admixed with the broad-leaved evergreen trees and conifers. Most of these fossil taxa are closely similar to the extant trees inhabiting in Japan. Thus, the origin of the modern vegetation in Japanese Islands may be traced back to the Late Miocene. It is important for the study of the vegetational history to clarify Late Neogene floras and their component taxa.

Compared with less known records of Central Honshu, Late Neogene floras of northeast Honshu and Hokkaido have been well investigated by various authors (Suzuki, K., 1959, 1961; Tanai, 1961; Murai, 1962-1963; Tanai & Suzuki, N., 1965, 1967; Suzuki, N., 1967; Uemura, 1988). Late Neogene floras of Central Honshu appear to have been more prolific in the exotic element than those of Northeast Honshu and Hokkaido, as shown in the Late Miocene flora of the Seto Porcelain Clay Formation of Gifu-Aichi Prefectures (Miki, 1941). The latitudinal difference of the vegetation during the Late Neogene may be suggested from Hokkaido to Central Honshu, as well as those during late-Early Miocene vegetation in Japan.

The purpose of this study is to envisage Late Neogene history of vegetational and environmental changes in Central Honshu. The recent accumulation of the radiometric ages of the plant-bearing formations in Central Honshu is making possible to determine the stratigraphic relationships of the respective floras, although the floras are generally similar in major components. Three regions in northwestern Kwantō, Central Shinshu and the eastern and southern margin of the Nobi Plain are selected here as the major fields of this study, because the floristic sequences during the Late Miocene and Pliocene are provided there. Furthermore, several minor floras from the Kwantō district are supplemented for this study.

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