

SL 206

Flavonoid Chemistry and its Implications of Paleobotanical History in Eastern Asia

Chin-Sung Chang*, and Jeong-Il Jeon

Department of Forest Resources, Seoul National University

The characteristic of Tertiary flora is that a large proportion of Neogene plants of their relatives now still living near their Neogene sites of occurrence, but typically only a small portion of plants are now a part of the local flora. Several case studies regarding *Betula*, *Fraxinus*, *Carpinus*, and *Acer* are presented as examples of speciation mode in eastern Asia. The chemical (flavonoids) and morphological data support a putative migratory route of taxa from southeastern China to Japan via Korea or northeastern China, which is consistent with modern theories of phytogeography. These combined data enable a more plausible hypothesis of the phylogenetic history of these taxa in eastern Asia. Several alternative hypothesis hypotheses with an appropriate tool and a conceptual approach may be helpful to clarify speciation mode and rates of Chinese-Korean-Japanese related species.