

Ethnobotany and morphological diversity of *Kalopanax septemlobus* (Poster)

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Introduction

Castor Aralia, *Kalopanax septemlobus* (Thunb.) Koidz. (Araliaceae), is belong to monospecies genus, native to Japan, Korea, China and Eastern coastal Russia. *K. septemlobus*, a deciduous hardwood species distributed in Northeast Asian regions, shows high economical values such as a good quality timber and edible and medicinal uses of roots, barks and young leaves. However, the population of *Kalopanax* drastically decreased in Korea. Increasing market demand has resulted in the rapid depletion and destruction of their natural habitats due to illegal harvesting.

Objectives

To analyze the phenetic relationships among the different morphological entities of *Kalopanax septemlobus* from throughout eastern Asia. Particular attention has been given to determining if the morphological variation among the previously distinguished taxa warrants recognition at the rank of species.

Methods

Twenty morphological characters selected for analyses included those most frequently utilized in keys and diagnoses. Morphological variation was assessed using univariate statistics (mean, maximum, minimum) and multivariate analysis (PCA).

Results

As expected, a lack of phenetic coherence was evident in multivariate analysis and *a priori* infraspecific taxa were virtually inseparable in a PCA projection. The analysis of frequency distribution of hair density demonstrated that this variable showed normal distribution

Conclusion

The results indicated that *Kalopanax septemlobus* should be recognized as one polymorphic species. Previously recognized infraspecific taxa were not supported to warrant the designation of any taxonomic rank. The observed pattern of variation may be environmentally induced and suggests that the species may exhibit environmental plasticity.

Keywords: Castor aralia, phenetics, infraspecific taxa

Selected references

1. Ohashi, H. 1994. Nomenclature of *Kalopanax septemlobus* (Thunb. ex Murray) Koidzumi and classification of its infraspecific taxa (Araliaceae). Journ. Jap. Bot. 69: 28-31.
2. Lee, T.B. 1980. Illustrated Flora of Korea. Hyangmun Co., Seoul (in Korean).

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