Taxonomy of Araceous Plants on Limestone Mountains in Lop Buri and Saraburi Provinces, Thailand

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Abstract: Araceous plant or Araceae is a monocotyledon family having numerous potential useful plants. Two hundred and ten species of Araceae were reported in Thailand, of which 43 species were reported as threatened plants. Fifty percent of endemic status and rare status plants were recorded in limestone areas. Currently, these areas are seriously threatened by land-use changes. The study on taxonomy of Araceous plants was carried out in Lop Buri and Saraburi limestone mountains from February 2011 to May 2015. The purposes of this study were to study species diversity, taxonomic character and ecological habitat. 55 specimens collected from various limestone areas including Pra Phut Tabat National forest (Pra Phut Tabat Mountain, Khao Pra Phut Tabat Noi Mountains, Wat Thum Krabog Mountain), Tab Khwang and Muak Lek Natinal forest (Pha Lad mountain, and Muak Lek waterfall) in Saraburi province, and Wang Plaeng Ta Muang and Lumnarai National forest (Wat Thum chang phuk mountain), Panead National forest (Wat Khao Samo Khon Mountain), Lan Ta Ridge National forest (Khao Wong Prachan mountain, Wat Pa Chumchon) in Lop Buri province. Twenty species of Araceous plants were identified using characteristics of underground stem, phyllotaxis and leaf blade, spathe and spadix. Species list are Aglaonema cochinchinense, A. simplex, Alocasia acuminata, Amorphophallus paeoniifolius, A. albispathus, A. saraburiensis, A. pseudoharmandii, Pycnospatha arietina, Hapaline kerri, Lasia spinosa, Pothos scandens, Typhonium laoticum, T. orbifolium, T. saraburiense, T. trilobatum, T. sp.1, T. sp.2, Cryptocoryne crispatula var. balansae, Scindapsus sp., and Rhaphidophora peepla. Five species are new locality records. One species (Typhonium sp.1) is considered as a new species. Seven species were reported as threatened plants in Thailand Red Data Book. Taxonomic features were used for key to species constructions. Araceous specimens were found in mixed deciduous forests, dry evergreen forests with 50-470 m. elevation. New ecological habitat of Typhonium laoticum, T. orbifolium, and T. saraburiense were reported in this study.

Keywords: ecology, limestone mountains, Lopburi and Saraburi provinces, species diversity, taxonomic character

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