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# Ecology of Gymnosperms in Eastern Indochina (Cambodia, Laos and Vietnam)

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## Résumé

Eastern Indochina is one of the richest Gymnosperm centers due to high ecological diversity. Present inventory documents 71 species of Gymnosperms from 22 genera and 7 families. Schematically, main kinds of their habitats (with number of their typical species) may be listed as follow: lowland forests, woodlands, shrublands and savannas on neutral soils (usually on basalts, shale, and alluvium of different genesis): plant communities of lowland plains (18 spp.), lowland flooded depressions (1), lowland hills and low mountains (29), more or less elevated plateaus (31); forests on soils derived from rocks with high percentage of silicate minerals (granite, gneiss, quartzite, sandstone etc.): lowland forests on elevations 0–700 m (26), submontane forests at 700–1500 m (28), montane forests at 1500–2400 m (18) and cloud thickets at 2400–3100 m (4); lowland forests on alluvial carbonate soils (21 spp.); forests on rocky karstic limestone: lowland forests at 0–700 m (21), submontane forests at 700–1500 m (6). The following Gymnosperms preferences according to soil and elevations were observed in assessed area: species of neutral soils – 3; silicate soils – 3, calcium soils – 19, silicate and neutral soils – 28, species of any kind of soils – 18; lowland species – 27, lowland and submontane species – 8, submontane species – 5, submontane and montane species – 23, montane species – 5 and species occurring at any elevations – 3. Tropical seasonal monsoon, wet or dry climate with a pronounced dry winter and rain summer seasons dominate in habitats of Gymnosperm species in E. Indochina. However, rainy period is shifted to autumn and even early winter months in coastal areas of southeastern part of Indochina Peninsula, as well as dry season in highlands may be very short or hardly pronounced. All data listed above are well illustrated by graphs, diagrams and original photos.

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