

Background: Deciduous dipterocarp forest (DDF) is the most widespread forest type of continental Southeast Asia. Four dominant canopy species of the DDF are often found in near-monodominant stands, but quantitative structure, species composition and regeneration status of these stands are little understood.

Aims: To quantify structural, compositional and regeneration variability of the dominant stands in the DDF at YokDon National Park in Central Vietnam.

Methods: We established seventy 0.04 ha plots across the Park to quantify the structure, species composition and regeneration patterns.

Results: We found distinct patterns of one or two of the four dipterocarp species dominated basal area in any given stand. Patterns of seedling dominance were not as distinct as in the canopy, nor were there strong associations between the dominant seedling and canopy species, particularly for *Shorea siamensis*. The most striking feature of the forest was the absence of saplings, implying a significant bottleneck in the structure.

Conclusions: Our results suggest a potential shift in the dominant canopy species in the DDF. The apparent lack of recruitment into the larger size classes and the decoupling of dominant species in the canopy and seedling layer raise questions about the future dynamics of the DDF.