

Decline in mean temperature with elevation correlates with a more or less gradual change in forest floristics mediated by minimum temperature tolerances and competition, and in its diversity, well documented on wet equatorial mountains. On the mountains of monsoon tropical Asia, the predominance of a single wet and dry season offers opportunity to relate increasing cloud and rainfall seasonality with a departure in a zonation most clearly recognised on equatorial mountains. Observations indicate that the lowland to lower montane forest transition is gradual and constant in elevation throughout the monsoon tropical Asia region, and contrasts with the variable elevation at which forest structure and physiognomy, alternatively floristics alone, changes between lower and upper equatorial montane forests. Both ecotones are observed to correlate with the elevation and seasonality at which decline in temperature daily results in condensation of water vapour into cloud, resulting in cloud shadow, and fog therefore water supply where cloud penetrates the canopy. Seasonal variation in these climatic interactions influence forest structure and physiognomy and, by mediating the interaction between vegetation and substrate, also leads to zonation in soils and consequently floristics. Historical biogeographical factors also influence zonal floristics.

