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Notes on the Shume-Magamba forest of the West Usambara mountains, Tanzania

The Shume-Magamba forest of the West Usambara mountains covers an large area of montane and upper montane forest reaching 2266 m on Sungwi peak. The summit vegetation is 4 m tall *Phillipia* heath with *Maytenus acuminata* and *Syzygium sclerophyllum*. Below this the moist forest can be arbitrarily divided into upper montane forest above 1800 m and montane forest below 1800 m. Canopy height increase from 10 m on ridge tops at 2180 m to 30 m with 50 m tall emergents (*Chrysophyllum gorungosanum*) at 1780 m. North of Sungwi the once extensive dry montane forest with *Juniperus* has mostly been cleared, converted to pine plantation or is heavily disturbed. The Magamba area was the subject of a study by Pitt-Schenkel (1938), one of the earliest of its kind, and was much later used for *Ocotea usambarensis* regeneration experiments following heavy logging for *Ocotea* (Willan, 1965). Old logging sites contain many small poles of *Macaranga kilimandscharica* and *Rapanea melanophloeos*. An old experimental plantation of *Rapanea* was also found.

Trees in upper montane forest included: *Albizia gummifera*, *Allophylus abyssinicus*, *Aningeria adolfi-friedericii*, *Aphloia theiformis*, *Bersama abyssinica*, *Canthium oligocarpum*, *Casearia engleri*, *Cassine aethiopica*, *Cassipourea malosana*, *Catha edulis*, *Chrysophyllum gorungosanum*, *Croton dictyphlebodes*, *Cryptocarya liebertiana*, *Cussonia spicata*, *Dasylepis integra*, *Dombeya torrida* subsp. *erythroleuca*, *Ekebergia capensis*, *Faurea saligna*, *Ficus thonningii*, *Galiniera saxifraga*, *Ilex mitis*, *Macaranga kilimandscharica*, *Maesa lanceolata*, *Maytenus acuminata*, *Neoboutonia macrocalyx*, *Nuxia congesta*, *Ochna holstii*, *Ocotea usambarensis*, *Olea capensis*, *Pittosporum viridiflorum*, *Polyscias fulva*, *P. stuhlmannii*, *Psydrax parviflora* subsp. *rubrocostata*, *Prunus africana*, *Rapanea melanophloeos*, *Syzygium sclerophyllum*, *Tabernaemontana pachysiphon*, *Trichocladus ellipticus*, *Vepris stolzii*. Shrubs and shrubby herbs included: *Chassalia parviflora*, *Draceana afromontana*, *D. laxissima*, *Lasianthus kilimandscharica*, *L. kilimandscharica* subsp. *laxinervis*, *Lobelia gibberoa*, *Memecylon deminutum*, *Mostuea brunonsis*, *Pauridiantha paucinervis*, *Peddeia fischeri*, *Piper capense*, *Psychotria cyathicalyx*. Climbers included: *Embelia schimperi*, *Landolfia*, *Schefflera myriantha*, *Toddalia asiatica*.

Trees in montane forest included: *Albizia gummifera*, *Aningeria adolfi-friedericii*, "*Apodytes dimidiata*", *Cassipourea malosana*, *Chrysophyllum gorungosanum*, *Cleistanthus polystachyus*, *Craibia brevicaudata* subsp. *schliebenii*, *Cussonia spicata*, *Dasylepis integra*, *Dombeya torrida* subsp. *erythroleuca*, *Drypetes gerrardii*, *Entandrophragma excelsa*, *Ensete ventricosa*, *Garcinia volkensii*, *Macaranga kilimandscharica*, *Polyscias fulva*, *Podocarpus falcatus*, *Strombosia scheffleri*, *Tabernaemontana pachysiphon*, *Trichocladus ellipticus*.

The forest towards Shume becomes drier would once have graded directly into *Juniperus* forest as evidence by the occasional *Juniperus* occurring in otherwise broad-leaved forest. A clue to dry forest biogeography comes from the specific epithets of the trees that occur there: *Bersama abyssinica*, *Cassine aethiopica*, *Ekebergia capensis* and *Olea capensis*. Many of the species are widespread and also occur in Ethiopia and the southern Cape. However, some dry forest trees of restricted distribution do occur in the West Usambara, for example *Croton dictyphlebodes*, *Macaranga conglomerata* and *Calodendrum eickii*, the latter species occurs in the *Juniperus* forest proper. Another endemic tree, the curious monotypic endemic genus *Platypterocarpus* has been collected in the area, but was not seen on this visit.

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References:

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