The history of Amorphophallus conservation in Indonesia

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The Amorphophallus genus consists of around 237 species distributed throughout the world. In Indonesia, 29 species are currently recognised, with many being endemic. In an effort to find species of Amorphophallus, inventory or exploration activities have been conducted since 1996, with Sumatra Island and West Java Province being the first locations that were explored. Apart from A. titanum, these expeditions also secured A. gigas, a species endemic to Sumatra. Other endemic species of Sumatra are A. asper, A. beccarii, A. forbesii, A. hirsutus, and A. manta. Four other species that can be found in Sumatra are A. haematospadix, A. paeoniifolius, A. muelleri, and A. prainii. Expeditions on the island of Java were carried out in 1997 and 1999. Around eight species of Amorphophallus are known to occur on this island, of which five are endemic. From 2000–2004, expedition activities were carried out in Sulawesi, especially Central and Southeast Sulawesi. From this activity, only two species were found, namely A. paeoniifolius and A. plicatus. In 2020, a new species, A. ardii, was discovered from this island. The presence of Amorphophallus species in West Papua is the lowest compared to other islands in Indonesia, with only two species known, namely A. paeoniifolius and A. galbra. High rates of forest degradation and deforestation in Indonesia, both in conservation and non-conservation forests, negatively impact the presence of Amorphophallus species in nature. Most of the original vegetation has become secondary forest, bush, coffee plantations, and non-vegetated open land. The opening up of forests causes the temperature and humidity of the surrounding air to increase. Likewise, the nutrient contents of the soil will slowly change and become unbalanced. Apart from these factors, hunting for tubers and rare species by poachers is also a serious threat to the survival of Amorphophallus species in Indonesia.