Habitat suitability modeling for two species of Catasetinae (*Catasetum bicolor* Klotzsch. and *Catasetum ochraceum* Lindl.)

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Orchids are a species group better known by its pollination relations, however, studies related with their geographic distribution are limited. In this research, we model the potential suitable habitats for two Catasetinae species (*Catasetum bicolor* Klotzsch. and *Catasetum ochraceum* Lindl.) which have Neotropical distribution. We recognized the ecological requirements analyzing the ecological conditions in the occupied ecological niche and we identified the suitable areas for these species using Maxent V3.4.1. Occurrence records from different sources (GBIF mostly), monthly multiannual climatic data (precipitation, maximum temperature, minimum temperature, average temperature, solar radiation) and 19 bioclimatic variables from WorlClim V2 were used. With Principal Components Analysis (PCA) we selected 23 (*C. bicolor*) and 19 (*C. ochraceum*) factors among a set of 79 factors to be used in Maxent. Although the climatic requirements are different for both species, PCA shows a strong influence of temperature, solar radiation and bioclimatic factors related with the precipitation of dry periods. The habitat suitability was identified at country, biome and ecorregion scale. The results highlight the geographic space shared by these species in humid and dry tropical and subtropical forests, which are among the most threatened biomes in the world due to high deforestation rates and habitat fragmentation.