

Project Update: March 2023

Distribution and host species preferences orchids across forest disturbance regimes

We assessed the influence of forest degradation regimes on the status of IUCN Red listed orchid's richness and abundance in the Southwest Mau (SWM) Forest, Kenya. SWM is one of the 22 blocks of the Mau Forest Complex lying between latitude 0° 33' South of the equator and 35 ° 21' East. The area lies between 2000- 2800 m asl. The project adopted the use of stratified systematic sampling where stratification was based on the three different disturbance regimes. The regimes included an intact forest, a moderately disturbed forest and highly disturbed forest sites. Preliminary results show that a total of seven orchid species were recorded in nine host tree species. In terms of orchid species distribution by forest disturbance regimes, intact forest had seven host tree species with five species, moderately degraded forest had four host tree species with two orchid species and severely degraded forest had no orchids observed. These results indicate that orchid species richness and abundance are influenced by forest degradation status. Forest destruction leads to the decline on the distribution and diversity of orchids. Therefore, there is need for concerted strategies to minimise the destruction of the forest ecosystem particularly the orchid habitats including their indigenous host trees.



Researchers observing epiphytic orchids on a host tree.



Scientist measuring the diameter of orchid host tree.



The research team holding a field discussion.



The research team using the Orchids of Kenya guidebook to identify orchids.