

Researchers report floristic plant composition inventory of Mount Elgon, East Africa

April 13 2023, by Li Yuan



Specimens collected from Mount Elgon A (i, ii, iii) *Peponium elgonense* (new species), B *Swertia crassiuscula* (regional endemic), C *Plantago lanceolata* (exotic), D *Indigofera homblei* (exotic), E *Tripogon major* (rare and endemic), F *Aloe elgonica* (Endemic to Mount Elgon). Credit: WBG

Mount Elgon, located at the boundary of Kenya and Uganda about 120 km North of Lake Victoria, is one of the oldest volcanic mountains in East Africa.

It hosts a unique ecosystem and possesses high plant diversity. However, the number of [species](#) in this ecosystem has been changing over time.

Researchers from the Wuhan Botanical Garden (WBG) of the Chinese Academy of Sciences (CAS) have documented a comprehensive list of the vascular plants of Mount Elgon from random-walk survey and retrieval of herbarium specimen dating back to 1900. The study was published in *Phytokeys* on April 4.

The study reveals that the flora of Mount Elgon constitutes 1,709 taxa (1,589 species, 75 subspecies and 45 varieties), representing 673 genera in 131 families. The plant taxa are classified into five classes: Magnoliopsida 1,230 species (72%), Liliopsida 396 species (23%), Polypodiopsida 72 (4%), Lycopodiopsida 7 species (0.4%), and Pinopsida 4 species (0.2%). The plant life forms of Mount Elgon are categorized as either trees, shrubs, climbers, lianas, or herbs.

This checklist records respective habitat, habits, elevation ranges, voucher numbers and global distribution ranges of each species. Native and [exotic species](#) are also distinguished, where 8.4% of the total species in 49 families are exotic species. There are 103 endemic species, while 14 species are found to be both rare and endemic. International Union for Conservation of Nature conservation status reveals two critically endangered, four endangered, nine vulnerable and two near threatened species.

They also made herbarium collections and took photographs of plants

endemic to Mount Elgon, as well as rare and endemic, regional endemic, and exotic species.

This study presents the first and most comprehensive plant inventory of Mount Elgon that will facilitate further ecological and [phylogenetic studies](#).

Wuhan Botanical Garden, the National Museums of Kenya and other collaborators have completed floristic survey on regions with rich biodiversity of Kenya including Mount Kenya, Mount Elgon, Aberdare ranges, Cherangani Hills, Nandi forest, and the Coastal forests. Such data is significant for the compilation of the flora of Kenya.

More information: Peninah Cheptoo Rono et al, An annotated plant checklist of the transboundary volcanic Mt Elgon, East Africa, *PhytoKeys* (2023). [DOI: 10.3897/phytokeys.223.97401](https://doi.org/10.3897/phytokeys.223.97401)

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