

A third of Africa's tropical flora threatened with extinction: study

November 20 2019



A third of tropical flora in Africa is threatened, including in southern Democratic Republic of Congo

A third of the species of tropical plants in Africa are potentially threatened with extinction, according to a preliminary estimate published

Wednesday by the journal *Science Advances*.

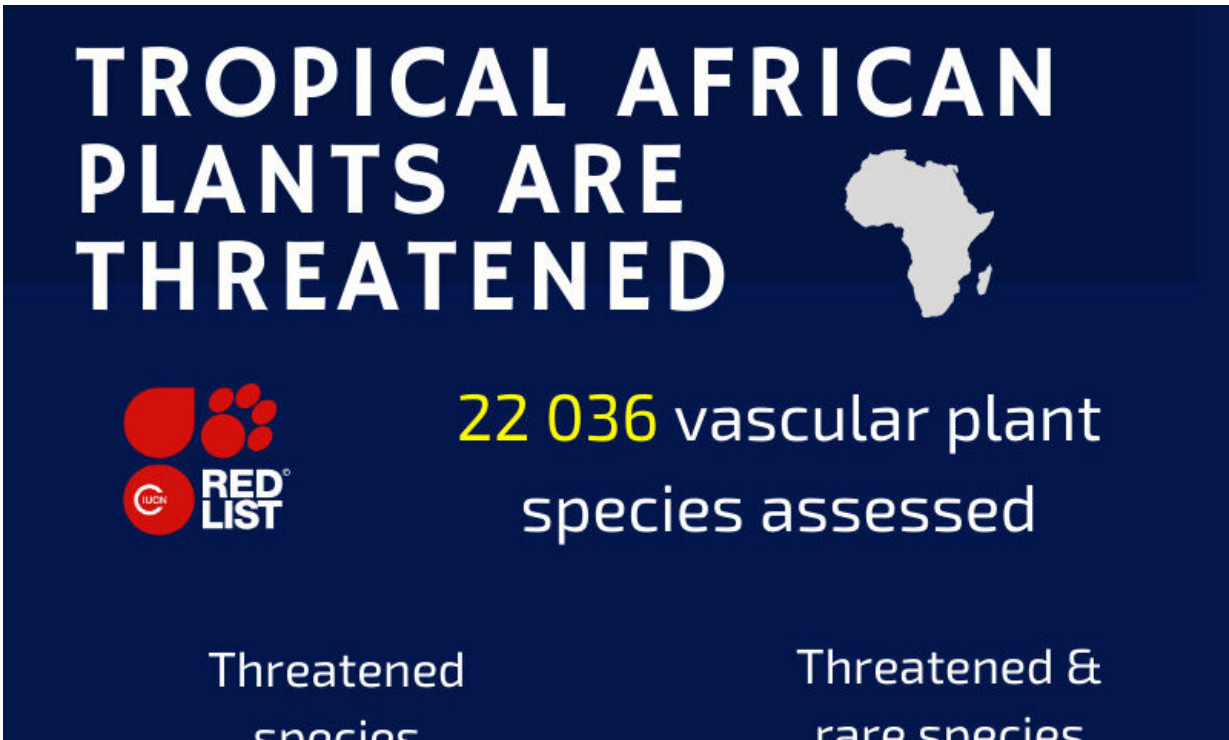
The most authoritative list of threatened species is the famous "Red List" maintained by the International Union for Conservation of Nature (IUCN).

While this list is relatively complete for mammals and birds, it is full of gaps when it comes to plants, only 10 percent of which have been assessed. These assessments are fastidious and time-consuming, and there are more than 350,000 [plant species](#) in all.

To work around this problem, a team coordinated by a botanist from the French National Research Institute for Sustainable Development, Thomas Couvreur, carried out a computer analysis of the status of more than 22,000 vascular plant species in tropical Africa.

To perform the analysis, they used information compiled in a database called Rainbio that is maintained by the French Foundation for Biodiversity Research.

The result was that 32 percent of the species, or nearly 7,000, were classified as likely or potentially threatened, based on either of two criteria recognized by the IUCN—a recent reduction in [population size](#) or [geographical distribution](#).



Infographic of the main results. Credit: Thomas L.P. Couvreur (IRD)

The regions found to be most at risk were Ethiopia, the center of Tanzania, the southern Democratic Republic of Congo and the forests of West Africa.

This rapid method is "a cost-effective way to initiate the Red List assessment process for a large number of species," the researchers wrote.

But "the two approaches are complementary. There still needs to be an important international effort to evaluate all the plant species in Africa," Couvreur said in a statement.

More information: T. Stévant et al., "A third of the tropical African flora is potentially threatened with extinction," *Science Advances* (2019).

[DOI: 10.1126/sciadv.aax9444](https://doi.org/10.1126/sciadv.aax9444) ,
advances.sciencemag.org/content/5/11/eaax9444

© 2019 AFP

Citation: A third of Africa's tropical flora threatened with extinction: study (2019, November 20)
retrieved 19 April 2024 from

<https://phys.org/news/2019-11-africa-tropical-flora-threatened-extinction.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--