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Over one-fifth of the world's 380,000-plus plant species are threatened with

Plant species in peril, report warns

By Matthew Knight for CNN

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- One-fifth of plant species worldwide are threatened by extinction, new study says
- "Sampled Red List Index" is first time "true extent" of threat has been recorded
- Man-induced habitat loss is biggest driver of endangering species, according to study
- United Nations meet in Nagoya, Japan next month to agree new biodiversity targets

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London, England (CNN) -- Over one-fifth of the world's plant species are threatened with extinction according to a new study compiled by the UK's Royal Botanical Gardens at Kew, London. The "Sampled Red List Index for Plants" is the first time the true extent of the threat to more than 380,000

plant species worldwide has been identified, according to researchers.

The study, published Wednesday, took five years to complete and used the Royal Botanical Gardens and London's Natural History Museum archives (which hold around 13 million specimens combined) along with data from the International Union for the Conservation of Nature (IUCN).

The report says that human activities (81 percent) far outweigh natural threats (19 percent) to plant biodiversity and are being fueled by agriculture, logging, plantations and livestock.

The overwhelming amount of this plant degradation is happening in tropical rainforests.

Steve Bachman, a plant conservation analyst and one of the lead researchers on the report told CNN: "It's not just the developing world or the Western world who are mostly to blame. We are all using plants in an unsustainable way.

"We need to take drastic measures to stop that and we need to understand more about how we utilize them."

Bachman says the situation in Indonesia -- where Western demands for Indonesian palm oil grown on land once covered in rainforests -- highlights the new interconnectedness of responsibility. Read a summary of the report here

Aided by Neil Brummitt, a botanical diversity expert, Bachman and a team of researchers examined around 7,000 plant species drawn from the five major plant groups.

These included bryophytes (mosses and liverworts), pteridophytes (land plants such as ferns),

gymnosperms (such as conifers and cycads), monocotyledons (flowering plants including orchids, grass and palm families) and legumes (peas and beans).

Both rare and common species were assessed in order to give a balanced conclusion of the extent of the risks.

Of the five plant classifications, gymnosperms were the most endangered group with 36 percent of plants examined being under threat.

Researchers conceded that over a third of the species in the study's sample were "so poorly known" that a conservation assessment wasn't possible.

Nevertheless, they are hopeful the new study will serve as a guide for future plant assessments.

"The point of this project is that we have set the baseline. We will need to do this every five years and see how it changes over time," Brummitt told CNN.

The report will be presented at next month's United Nations Convention on Biological Diversity in Nagoya, Japan, where representatives from 193 nations are meeting to discuss new measures to tackle the biodiversity crisis.

Stephen Hooper, director of the Royal Botanical Gardens, Kew said: "The 2020 biodiversity target that will be discussed in Nagoya is ambitious, but in a time of increasing loss of biodiversity it is entirely appropriate to scale up our efforts.

"Plants are the foundation of biodiversity and their significance in uncertain climatic, economic and political times has been overlooked for far too long."

At a U.N. summit in New York earlier this month, U.N. Secretary-General Ban Ki-moon urged world leaders "to commit to reducing biodiversity loss."

At the same summit Jose-Manuel Barroso, president of the European Commission, called on countries to agree a strategic plan to "tackle the key drivers of biodiversity loss" and "to prevent ecological tipping points from being reached."