

TOP 10 PLANT DISCOVERIES!

Experts reveal their most incredible new finds...

*And fungi – which aren't plants or animals, but a separate category all of their own!

Every year around **2,000 plants and fungi** are named as **new to science!** The brilliant **botanists and mycologists** of **Royal Botanic Gardens, Kew, UK**, help **discover, identify and name** many of these exciting specimens – some of which might become **future food or medicine!**

Not all newly-named species are new to humanity – they've simply remained unknown to the **scientific world!**

1

TRAVELLING TOADSTOOL?

NAME: *Cortinarius heatherae*
FROM: UK

London's Heathrow Airport may seem like an unlikely place for a new discovery – but that's exactly where **mycologist (fungi expert) Andy Overall** found a new type of toadstool! He was strolling the river on the boundary of the airport when he spotted the 'shroom. Andy named the fantastic find after his wife **Heather** in 2020. How very romantic!

SUPER 'SHROOMS
Fungi in the *Cortinarius* family help plants to grow and provide **nitrogen** to trees!

Six new toadstools were named last year in the UK.

2 STRANGE SHRUB!

NAME: *Tiganophyton karasense*
(The first part means 'frying pan plant' in Latin!)
FROM: Namibia

Botanist **Wessel Swanepoel** was bemused when he encountered this bizarre **scaly-leaved plant** in the hot **semi-desert** of **southern Namibia, Africa**, back in **2010** – he couldn't even figure out what **plant family** it was from. So Wessel called on Kew's molecular expert, **Felix Forest**, for help. After **DNA analysis**, it tuned out that the plant Wessel had discovered wasn't **just a new species** – but a **whole new plant family**. Wow!

3

DAGGER-TONGUED ORCHID

NAME: *Bulbophyllum dologlossum*
FROM: New Guinea

New plant discoveries are ten-a-penny in the tropical paradise of **New Guinea, Southeast Asia**, the **world's most biodiverse tropical island**. An incredible **19 new tree-dwelling orchids**, all from New Guinea, were named in **2020!** Many of them have **spectacular flowers**, but our fave is this 'dagger-tongued' *Bulbophyllum*, which looks like it's **sticking its tongue out**. Cheeky!

Many of the newly-named orchids have only been **found once**, and some are only known from a **single preserved specimen!**

4

ALOE, ALOE!

NAME: *Aloe vatovavensis* and *A. rakotonasoloi*
FROM: Madagascar

You've probably heard of the '*Aloe vera*' plant – its **leaves** are used in soothing **after-sun lotions!** Well, now **two new species** of the *Aloe* family have been spotted in **Madagascan forests!** When scientists first found the plants (which usually grow in **open spaces**), they **weren't in flower**, so they transported them to the **Madagascar Conservation Centre** to cultivate them. Once the flowers had bloomed, the species were confirmed as **new to science!**

Could the leaves of the new *Aloes* be used in medicines?

Turn over to meet some plant-explorers!

5

UGLIEST ORCHID?

NAME: *Gastrodia agnicellus*
FROM: Madagascar

Think 'orchid', and you'd probably imagine a **showy, vibrant and beautiful flower**, right? Well, **NOT** this one! Its **11-mm flowers** are **small, brown and rather ugly!** The plant doesn't have any leaves to make **food**, and so depends on **fungi** for its nutrition. Once the flower has been **pollinated**, its **stalks grow tall, lifting the fruit off the floor** so its **dust-like seeds** can **disperse** easily through the forest.