RBGE’s ginger could be new to science

Plant hunters from Scotland’s leading botanical garden believe a ginger specimen in its collection for over 50 years may in fact be new to science – after braving a crocodile infested river, torrential rains and tropical fevers to find a living match in Papua New Guinea.

Scientists from the Royal Botanic Garden Edinburgh (RBGE) and partners in Papua New Guinea were searching for a living match for the herbarium specimen first recorded in 1969.

Described 55 years ago as the enigmatic Alpinia fusiformis, further studies have now confirmed it is actually a different species, which may turn out to be new.

Dr Axel Dalberg Poulsen, RBGE’s gingers specialist, and the team used a “traditional plant hunting approach to navigate crocodiles on the Oriomo River, torrential rains and tropical fevers” in their search for a matching plant to confirm his suspicions.

Seeds were flown back to Scotland and young plants are now thriving at RBGE, where they will eventually go on display.

Dr Poulsen, who will return to the southwestern Pacific country this summer to continue the work, said: “The ginger which we’ve- ound in Papua New Guinea will not only inform our understanding and conservation efforts in and around the island, but we hope that the species can also go on to be a new star of the visitor experience when our Glasshouses reopen to the public after the Edinburgh Biomes refurbishment.

“The business of collecting plants and ‘plant hunting’ is a challenging and exciting one – often navigating dangerous terrain in the name of biodiversity research.

“But there is a very strong motivation driving the work. Every new discovery could have a significant material impact on global biodiversity loss, which is one of the biggest climate challenges facing the world today.

“With the support of funders such as People’s Postcode Lottery, and our international partners, these plants are now part of the greater objective in which we play a part.”

Experts at RBGE also helped to identify two previously unrecorded types of begonia in northern India last year.

Dr Mark Hughes, RBGE’s Taxonomy Research Leader for Southeast Asia and a specialist in begonias, said: “Assigning scientific names to species is at the core of biodiversity accounting.

“It is only once a species is named that you can truly investigate what its place is within the environment and therefore how mankind can work to use it or protect it.”

Southeast Asia, home to 15% of the world’s tropical forests, is at the forefront of the biodiversity crisis. However, a lack of understanding of the region’s diversity means species are in danger of being lost before they are known or their benefits to mankind are fully understood.

RBGE collaborated on a two-pronged approach to modern plant hunting, combining digital and traditional fieldwork in a bid to better understand the region’s diversity and the threats that they face to support sustainable conservation action.