

PhD placement/PIPS: Plant megadiversity conservation in New Guinea

Placement supervisor:

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Placement department:

Accelerated taxonomy - Asia team

Placement overview and objectives:

Taxonomy has been the backbone of Kew's scientific research since the organisation's establishment, and our collections and taxonomic experts are essential to the processes of discovering, describing and conserving biodiversity. The Accelerated Taxonomy department aims to push the frontiers of taxonomic research to accelerate the characterisation and identification of species in near real-time. The Asia team has a focus on the Malesian flora, particularly Indonesia and Papua New Guinea.

With our South-East Asian partners, we aim to demonstrate the need for *in situ* conservation, its prioritisation and implementation, through the Tropical Important Plant Areas (TIPA) protocol in Indonesian New Guinea, particularly for the province of West Papua. We undertake habitat assessments, and deliver training in plant identification, taxonomy, vegetation survey and extinction risk assessment both at Kew and with South-East Asian partners.

Working with our team on a PhD placement project would give you an insight into the approaches we are taking to conserve the megadiverse flora of New Guinea.

Tasks to be undertaken/possible projects:

Projects can be developed according to the interests of applicants. Some ideas are listed below: we are happy to discuss alternatives.

- Traits for Tropical Important Plant Area (TIPA) Prioritisation: collect trait data from a selected plant group and contribute to analyses.
- IUCN red listing for Indonesian species: complete conservation assessments for a selected group of plants, to include gathering information from herbarium specimens, georeferencing and researching threats to habitat.
- Expand the TIPAs network in Asia: input species-level data from potential Important Plant Areas in Indonesia to assess status.

- Describing species new to science: contribute to the research and outputs necessary to formally describe a plant species.
- Outreach: work with the team to increase public engagement with our science, within the UK and SE Asia e.g. produce an information booklet on plants of the New Guinea TIPA.

Required skills and experience:

- Basic knowledge of plant morphology
- IT skills, including databasing and statistical analysis

Skills and areas of knowledge that can be developed:

- Plant Identification, Plant Taxonomy, IUCN red listing process, georeferencing, working with herbarium specimens.
- Teamwork (ability to integrate into the Asia team)
- Project management (manage their own time as well as tasks to be completed by other team members)
- Presentation skills
- Communication skills e.g. writing for a non-specialist audience
- Working with international partners
- Basic Bahasa Indonesia

Location of work:

Most work will need to be onsite at Kew, Richmond

Length of placement:

3 months minimum