

# PhD position in biodiversity assessment

**Vacancy number: PSG-Biosys-0001**

**Wageningen UR, Plant Sciences, Biosystematics and Netherlands Centre for Biodiversity Naturalis (section National Herbarium of the Netherlands)**

**Location: Wageningen**

Wageningen University and Research Centre (Wageningen UR) is an international renowned knowledge institute in the fields of life sciences and sustainability. It makes an essential contribution to the quality of life through pioneering research and innovative education in the fields of health and nutrition, sustainable agricultural systems and a viable environment.

Wageningen Plant Sciences is a Wageningen UR consortium, bringing together the expertise of Wageningen University and the research institutes Plant Research International and PPO (Applied Plant Research). Dedicated to the field of plant-related research and education, Wageningen Plant Sciences has over 1200 staff members at 17 locations throughout the Netherlands.

The Netherlands Centre for Biodiversity Naturalis (NCB Naturalis) is a recent merger of the NNM Naturalis, the Zoological Museum Amsterdam and the National Herbarium of the Netherlands. It wants to be an open archive of Life's Diversity dedicated to reconstruct and understand the Tree of Life, to educate people about our natural world, and to raise awareness for the sustainable use of Earth's living resources.

## **Project Information:**

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The PhD project will be performed at the Wageningen branch of the National Herbarium of the Netherlands (NHN-Wageningen), now part of the new NCB Naturalis, forming an academic workplace for its three academic partners among which Wageningen University. The project is funded through specific budget made available by the NHN to the Wageningen University Biosystematics Group which accommodates the NHN-Wageningen.

Back in 2005, the question "What determines species diversity?" was selected as one of the 25 most important fundamental but still unanswered questions in science. The project "What determines species diversity in Central African plants?" will build on unique data and experience gained by the NHN-Wageningen on the botanical

diversity of Gabon and adjacent countries. Species distribution patterns are explained by contemporary and historical factors. The latter are, however, generally not taken into account when performing Species Distribution Modelling to arrive at potential species distributions and richness estimations. Moreover, common species may well show different species richness patterns than rare ones. The PhD student will use a unique database of herbarium specimen records to address these problems, but also to improve methods for direct species richness estimations from such data using modelling and non-parametric estimators to improve the accuracy of such analyses. Central Africa provides an highly suitable region, the rain forest having experienced major changes during the Pleistocene glacial periods.

**Job Description:**

The PhD project will be performed within the Research School Biodiversity, under the guidance of Prof.dr. M.S.M. Sosef and Dr. N. Raes. The final project outline will be determined with the successful candidate during the first few months of the appointment. After a thorough check and quality improvement of the basic herbarium record data, the PhD student will work towards improvement of existing methods in Species Distribution Modelling in a GIS environment but also of non-parametric estimators of species richness. Ground truthing through field work in Gabon is an option. Thus, the project combines practical work with modelling and statistical analyses. The PhD student will be asked to participate in educational obligations of the Biosystematics Group.

**Profile:**

You have a university degree in Biosystematics or a related field, with experience with or strong interest in GIS, Species Distribution Modelling, statistical analyses and biodiversity. Knowledge of and experience with natural history databases, herbarium collections, tropical field work or African plants will be considered as an advantage, as will proven educational skills.

**Remuneration:**

Appointment will be at Wageningen UR. This is a full-time scientific training position, temporary for a period of one year with a possible extension of three years, to be concluded with a PhD thesis. Gross salary: € 2042,-- per month in the first year, rising to € 2612, -- per month in the fourth year, according to the Collective Labour Agreement of the Dutch Universities.

**Location:**

Wageningen

During the project, the PhD will be working at the NHN-Wageningen, a section within the Biosystematics Group. The PhD will infrequently travel to Leiden to meet with the co-promotor. The NHN-Wageningen will probably move to Leiden by the end of 2013, which may well lead to intensified travel.

**Information:**

Further information can be obtained from Prof.dr. Marc S.M. Sosef, (Biosystematics Group), tel. +31 317 483306 (e-mail: Marc.Sosef@wur.nl).

**Application:**

Please send your letter and curriculum vitae, mentioning the vacancy number, before **March 10<sup>th</sup>, 2010**. From Febr. 24 onwards, Look at [www.wur.nl](http://www.wur.nl), choose Jobs at – Vacancies.