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Group



Established in 1994

to increase global awareness of conservation threats to medicinal plants, and to promote sustainable use and conservation action.

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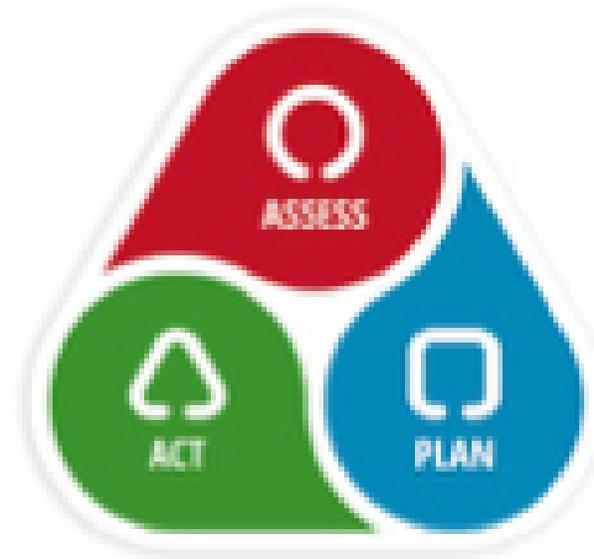
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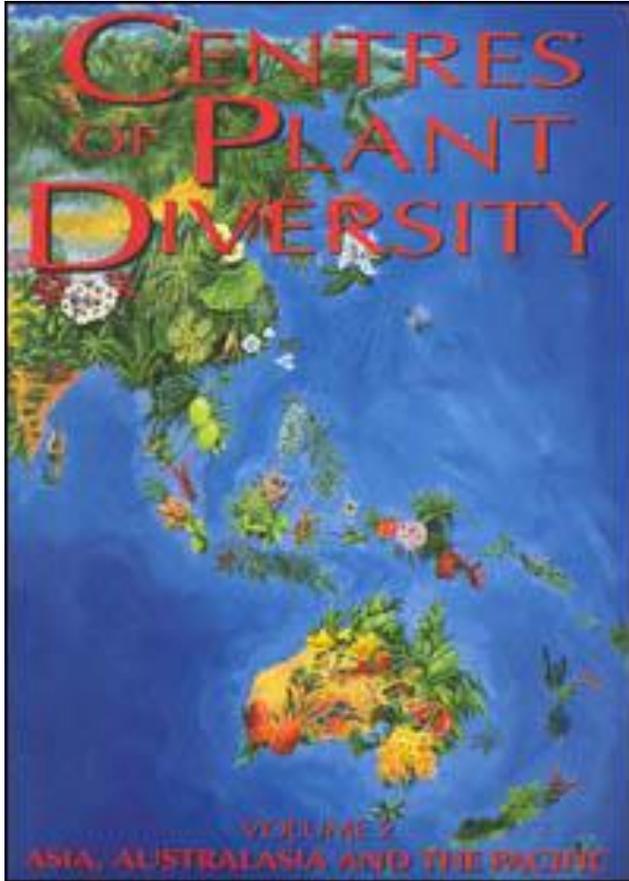
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<https://iucn.org/our-union/commissions/species-survival-commission/about/become-ssc-member>

IUCN Quadrennium 2026-2029  
SSC Strategic Plan



## Centres of Plant Diversity WWF & IUCN, 1995



Davis, S.D., Heywood, V.H. & Hamilton, A.C. (1995). *Centres of Plant Diversity: a Guide and Strategy for their Conservation, v.2. v.2. Asia, Australasia and the Pacific*. WWF & IUCN, Gland, CH.



# Global Centres of Vascular Plant Diversity

## German National Academy of Sciences Leopoldina, 2005

Nova Acta Leopoldina NF 92, Nr. 342, 61–83 (2005)

### Global Centers of Vascular Plant Diversity

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With 2 Figures and 1 Table

#### Abstract

The diversity of vascular plants is very unevenly distributed across the globe. The five centres that reach species richness of more than 5,000 spp./10,000 km<sup>2</sup> (Costa Rica-Chocó, Atlantic Brazil, Tropical Eastern Andes, Northern Borneo, New Guinea) cover only 0.2 % of the terrestrial surface. On the other hand approximately 18,500 spp. are endemic to these centres which represent 6.2 % of all vascular plant species. A world map of vascular plant richness is presented based on an extensively expanded data base (more than 3,300 species richness figures for different regions of the world) and a refined methodology. Most of the global centres are located in mountainous regions within the humid tropics, where suitable climatic conditions and high levels of good diversity, i.e., the diversity of abiotic conditions, coincide. A complete review of most prominent climatic, geologic, and floristic features of the 20 centres of phytodiversity with more than 3,000 spp./10,000 km<sup>2</sup> is presented.

#### Zusammenfassung

Die Vielfalt der Gefäßpflanzen ist äußerst ungleichmäßig auf der Erde verteilt. Die fünf Zentren mit mehr als 5000 spp./10000 km<sup>2</sup> (Costa Rica-Chocó, Atlantisches Brasilien, Tropische Ost-Anden, Nord-Borneo, Neu-Guinea) bedecken zwar lediglich nur 0,2 % der gesamten Erdoberfläche, jedoch sind ungefähr 18.500 spp. endemisch für diese Zentren (6,2 % der Gefäßpflanzenarten weltweit). Eine Weltkarte der Pflanzenvielfalt wird vorgestellt, welche auf einer erweiterten Datengrundlage (weltweit mehr als 3300 Artenzahlen für verschiedene Regionen) und einem verfeinerten methodischen Ansatz basiert. Die meisten Zentren der Artenvielfalt liegen innerhalb gebirger Regionen der immerfeuchten Tropen, wo geeignete klimatische Verhältnisse und ein hohes Maß an Gooddiversität (Vielfalt abiotischer Faktoren) aufeinander treffen. Ein Überblick über die wichtigsten klimatischen, geologischen und floristischen Charakteristika der 20 globalen Phytodiversitätszentren mit mehr als 3000 Gefäßpflanzenarten pro 10000 km<sup>2</sup> wird präsentiert.

#### 1. Introduction

The exploration of large-scale patterns of biodiversity has attracted massive scientific interest at least since the first European botanists, zoologists, and biogeographers set out to the tropics to discover and describe the plenty of life. Despite the long tradition of the scientific exploration of the spatial variation of diversity, patterns, and processes are still poorly understood. The knowledge on the distribution of life on earth and its underlying causes is not merely of academic interest for ecologists and biogeographers, but has rather become a crucial need in the context of conservation planning, international politics, and sustainable use of genetic resources. Vascular plants play an important role as primary producers in most terrestrial

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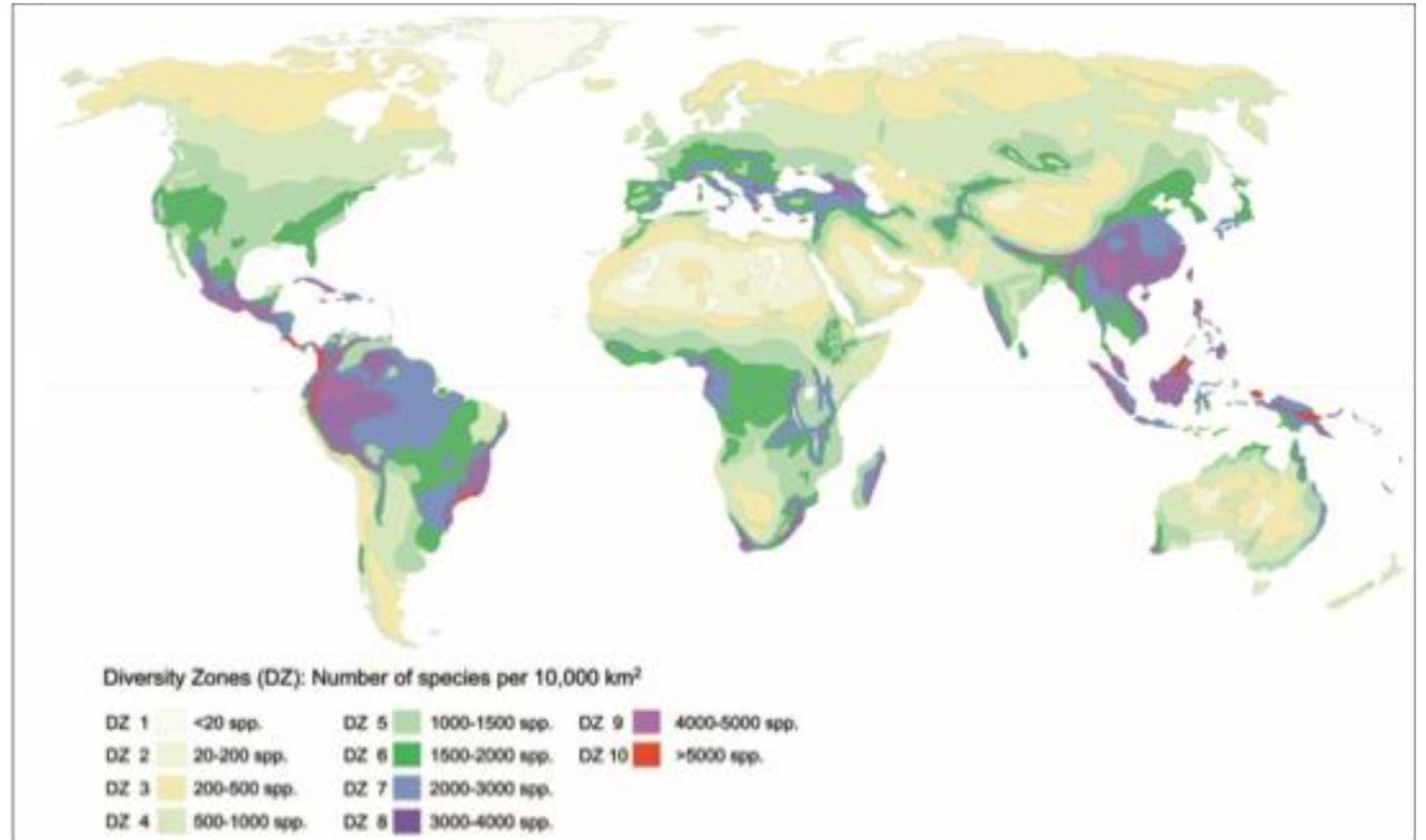


Fig. 1 Global Biodiversity: Species numbers of vascular plants. W. BARTHOLOTT, G. KIER, H. KREFT, W. KÜPER, D. RAFIQPOOR and J. MUTKE 2005 revised after BARTHOLOTT et al. 1996, Nees Institute for Biodiversity of Plants, University of Bonn, Robinson Projection, Standard Parallels 38 °N and 38 °S

Barthlott, W., Mutke, J., Rafiqpoor, D., Kier, G. & Kreft, H. (2005). Global Centers of Vascular Plant Diversity. Nova Acta Leopoldina 92 (342):61-83.



## MPSG Projects and Partnerships

*Red List of North American Medicinal Plants*

*Red List Re-assessment European Medicinal Plants*

CSS-New Mexico – BioPark Society

### Possible Pacific Region Partners

National Tropical Botanic Garden,  
Hawaii

CSS-Southeast Asia – Mandai Nature  
Singapore (bird focus)

CSS-Australasia – Zoo and Aquarium  
Association (animal, ecosystem  
focus)

Research institutions, botanic  
gardens?

# IUCN SSC Centres for Species Survival



“ The current goal is to establish at least one Center for Species Survival on each continent, and for each of these teams to be key catalysts working closely with SSC to provide support in training, assessments, planning and mobilizing action across the conservation community within their regions.