Miocene Vegetation of the African Tropics (Project MioVAT)

Fact Sheet

Project Information

MioVAT

Grant agreement ID: 328245

Project closed

Start date
1 June 2013

End date
31 May 2015

Funded under
Specific programme "People" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007 to 2013)

Total cost
€ 221 606,40

EU contribution
€ 221 606,40

Coordinated by
THE UNIVERSITY OF EXETER
United Kingdom

This project is featured in...

Objective

Tropical forests and savannahs cover between 15 and 20% of the Earth's land surface, and dominate the tropics of South America, Australia, Asia and Africa. These two biomes exert a profound control on temperature, precipitation and carbon storage, and are also important centres of biodiversity. The evolutionary history of tropical forests and savannahs is of major international concern, and an understanding of the controls on tropical plant diversity can inform conservation efforts designed to prevent tropical plant extinction during the current anthropogenic biodiversity and climate crises. Project MioVAT (Miocene Vegetation of the African Tropics) will investigate the evolutionary history of the tropical forest and savannah biomes in West Africa during the Miocene (23-5.3 million years ago) using fossilized pollen and spores. The Miocene was a critical period in the evolution of West African tropical vegetation when grasses utilizing the C4 photosynthetic pathway began an explosive phase of ecological expansion that resulted in the birth of the savannah biome. The objectives of Project MioVAT are as follows: (1) To generate a c.20 million-year record of tropical plant diversity in West Africa from the latest Oligocene to the earliest Pliocene; (2) To quantify the nature and timing of plant extinction in the Miocene of tropical west Africa; (3) To quantify the taxonomic diversity of grasses during the birth of the savannah biome in the Late Miocene using fossil pollen grains. This research is designed to investigate the long-term controls on tropical plant diversity such as global temperature, investigate the role of extinction in shaping the tropical vegetation of West Africa, and understand the biome-scale diversification history that underlies the evolutionary success of grasses. Project MioVAT will create long-term collaborations, share knowledge, and result in mutually beneficial research co-operation between Europe and the United States.

Fields of science (EuroSciVoc)

humanities > history and archaeology > **history**

agricultural sciences > agriculture, forestry, and fisheries > agriculture > **grains and oilseeds**

natural sciences > biological sciences > ecology > **ecosystems**

natural sciences > earth and related environmental sciences > atmospheric sciences > climatology > **climatic changes**

Programme(s)

FP7-PEOPLE - Specific programme "People" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007 to 2013)

Topic(s)

FP7-PEOPLE-2012-IIF - Marie Curie Action: "International Incoming Fellowships"

Call for proposal

FP7-PEOPLE-2012-IIF
See other projects for this call

Funding Scheme

MC-IIF - International Incoming Fellowships (IIF)

Coordinator

THE UNIVERSITY OF EXETER

EU contribution

€ 221 606,40

Total cost

No data

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Region

South West (England) > Devon > Devon CC

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Last update: 25 May 2022

Permalink: https://cordis.europa.eu/project/id/328245