The African Pollen Database has organized a special meeting during the 10th ICP congress at Nanjing (June, 2000). Oral presentations and posters were presented and a general discussion has been organized to discuss the network organisation, progress in data compilation and analysis. The APD contribution to the 10th ICP was funded by the European Union and UNESCO.

SYMPOSIUM - POLLEN DATABASES AND GLOBAL CHANGE IN MONSOON AREAS

Convenors : *Jolly Dominique, Bonnefille Raymonde*

Topic

One of the pressing needs of Global Change research is palaeoclimatic records of the tropics. Models of the earth's climate emphase the importance of orbital variations, changes in extent of ice-sheets and in the atmospheric composition, associated with ocean and land-surface feedback in causing major changes in the monsoon dynamics. However, the paucity of continental data from the monsoon region, emphasized in the results of the BIOME 6000, PMIP, and TEMPO projects, limits the reliability of model/data comparisons in this critical region. Pollen records constitute a reliable climatic proxy. But syntheses of palynological studies at regional or continental scales relies on community-wide participation for data compilation and associated quality control. Initiatives for the creation of pollen data bases, such as the African, the Chinese and the Indo-pacific Database will provide the appropriate tools for this task. The aim of this symposium is to encourage such syntheses as well as new numerical approach and techniques for interpreting climatic signal in the pollen record. Particular attention should be devoted to the precession cycle and the distinction between human impact and climatic changes during the last millennia.

APD Members Contribution : oral presentations and posters

APD members - African Pollen database

- Barboni D., Bonnefille R. - The Monsoon climatic signal in modern pollen rain from South India.
- Bonnefille R., Peyron O., Chalié F., Jolly D. - African monsoon at 6kyr, variability through time and spatial variations.
- Cheddadi R., De Beaulieu J.L. - the European Pollen Database
- Darbyshire I., Lamb H., Verschuren D., Mohammed Umer M. – Pollen and charcoal records of recent land-use change in Ethiopia and Kenya
- Guiot J., Jolly D., Peyron O., Bonnefille R., Vincens A., Elenga H., Kaplan J.O. - The climate of African during the last glacial maximum as reconstructed by inverse vegetation modelling and pollen data Hoepffner M. - Which databases for paleoclimatologists?
- Jolly D., Cassignat C., Flores O., François L., Gritti E., Plagnol C., Bonnefille R., Guiot J., Kaplan J. - The use of a physiologically-based vegetation models to investigate the impact of climate and atmospheric CO2 concentration on the Holocene vegetation changes in central Africa
- Le Thomas A. - Appearance and radiation of Angiosperms in the Cretaceous
- Le Thomas A., Suarez-Cervera M., Chatrou L. - Morphological and ultrastrucutral characters in the Malmea alliance (Annonaceae)
- Lézine A.M. - Vegetation response of Arabian ecosystems to monsoon circulation during the Holocene
- Lézine A.M., Edorh Th., Cazet J.P. - Mangroves of West Africa: past and present pollen record
- Marchant R., Boom A., Hooghiemstra H. Comparison of pollen-based biome reconstruction with a d13 C proxy of atmospheric change for the Funza II record from Colombia: the relationship to the precession cycle.

- Nakimera-Ssemmanda I., Osmaston H., Hamilton A., Vincens A. - Human Impact on the vegetation of Fort Portal area, Western Uganda, during the Late Holocene
- Sykes M. - Modelling of vegetation dynamics, biogeography and biogeochemical cycles at different scales and under different climates
- Umer M., Bonnefille R. - Modern pollen rain of a south eastern Ethiopian montane forest and its recent history from a high resolution pollen record in lake Langano, main Ehtiopian Rift.
- Vincens A., Ecofit Members - Impact of the Late Holocene arid event on Atlantic Equatorial African forests and inheritance on the modern landscape.

APD BUSINESS MEETING

- *presentation of the web page* : data access and products
- *presentation of the African pollen flora* : "pollen atlas of Sub-Saharan Africa"
- *open discussion* :
  - **data collection** :
    - ✓ the African pollen flora : 6000 photos of reference pollen grains have been collected, corresponding to 148 families.
    - ✓ Photos of 710 pollen taxa are on line
    - ✓ 180 late Quaternary pollen sequences are gathered ; they are available in a "tilia" format through the Internet. 101 are in the format of "paradox" tables.
    - ✓ 1194 modern samples have been gathered. The collection of data will be stopped at the end of 2000. After this date, they will be available through the web with additional tools for interpretation and modelling
  - **pollen diagrams** : to date, "quick look" diagrams are available for 30 late Quaternary pollen sequences
  - **modern pollen data** : isopollen and proportional circle maps are drawn for the modern pollen data
  - **pollen data from North Africa** : pollen data from north Africa will be included into the APD. They are now available at the LBHP laboratory in Marseille (Joel Guiot).
  - **List of pollen taxa**. The list firstly elaborated by Annie Vincens from the late Quaternary pollen sequences has been completed by Anne-Marie Lézine in including all the modern pollen data gathered to date:
  - **software tools** will be available to provide depth-age models (calib, Dep-Age). The use of these tools to establish a default chronology needs to be discussed with the authors.
  - **The organization of the next meeting** is placed under the responsibility of Mohammed Umer (Ethiopia) in collaboration with Louis Scott (South Africa), Annie Vincens (France) and Henry Lamb (England). The topic will be " PAST RECORDS OF LAND COVER CHANGE , CLIMATE OR THE HUMAN IMPACT". This meeting will be held in Nairobi Kenya (October, 2001) together with that of the "SEARCH" Enrich network.
  - **Data policy** :
    Protocols for use have to be respected. In particular, contributors have to be contacted for discussion or associated when their data are used for environmental/climate reconstructions. See §C-3 "ethical recommendations" (minutes of the meeting on the structure of the african pollen database held on the 9th september 1996 at Bierville, France) :

    C – Users
    1 - Should cite, in any publication using data from the database, the contributors' original publications and/or APD sources.
    2 - Should acknowledge the contributors of unpublished data used and any advice such contributors might have provided.
    3 - Normal ethics pertaining to co-authorship of publications applies. The contributor should be invited to be a co-author if a user makes significant use of a single contributor's site, or if

a single contributor's data comprise a substantial portion of a larger data set analyzed, or if a contributor makes a significant contribution to the analysis of the data or to the interpretation of the results.

C - Les utilisateurs

1 - Ils devront citer l'auteur des publications originales et/ou les sources de l'APDB, dans toute publication où il a été fait usage des données de la banque.

2 - Ils devront remercier les auteurs des données non publiées utilisées, et des avis que ces auteurs auront pu leur donner.

3 - Les règles normales d'éthique s'appliquent pour la participation des auteurs aux publications. L'auteur des données devra être co-signataire s'il est fait un usage significatif d'un site unique, si ses données constituent une part substantielle d'un ensemble plus large de données, ou s'il contribue fortement à l'analyse des données ou à l'interprétation des résultats.