

International Organisation of Palaeobotany (Homepage: www.palaeobotany.org)

#### **IOP NEWSLETTER 93**

# October 2010 CONTENTS

The views expressed in the newsletter are those of its correspondents, and do not necessarily reflect the policy of IOP. Please send us your contributions for the next edition of our newsletter (January 2011) the latest by January 15<sup>th</sup>, 2011.

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*IOP Logo: The evolution of plant architecture* (© by A. R. Hemsley)

#### **UPCOMING MEETINGS**

#### Annual Meeting of the Palaeobotanical Committee of the Chinese Palaeontological Society of China

(Xishuangbanna Tropical Botanical Garden, Yunnan, China, November 14 – 16, 2010)

Please see details Newsletter 92, July 2010.

#### Chinese Academy of Sciences NECLIME Symposium -Neogene climate evolution in Eurasia

(Kunming, Yunnan, China; November 18 – 20, 2010)

Please see for details Newsletter 92, July 2010.

## **28**<sup>th</sup> Midcontinent Paleobotany Colloquium (MPC)

(North Carolina State University, mid-May, 2011)

Please see for details Newsletter 92, July 2010.

### IBC 2011 - XVIII International Botanical Congress

(Melbourne, Australia 3-30 July, 2011)

Please see for details Newsletter 91, April 2010.

#### IPC XIII/IOPC IX 2012, TOKYO, Japan 13th International Palynological Congress 9th International Organisation of Palaeobotany Conference (August 23 - 30, 2012, Chuo University, Tokyo)

Please see for details Newsletter 92, July 2010.

http://wwwsoc.nii.ac.jp/psj3/jp/index.htm

#### **REPORTS FROM PAST MEETINGS**

## 3<sup>rd</sup> International *Metasequoia* Symposium August 3 to 8, 2010, Osaka, Japan

On August 2010, 60 scientists from 10 countries (China, Germany, Hungary, Italy, Japan, Korea, Switzerland, Taiwan, Thailand, and US) met in Osaka, Japan for the 3<sup>rd</sup> International *Metasequoia* Symposium. The symposium was held at the Osaka Museum of Natural History (OMNH), which was Dr. Shigeru Miki's home institution and now serves as the repository for the type specimens of M. disticha and M. japonica that he described in 1941. The meeting was coincident with the 70<sup>th</sup> anniversary of the establishment of the genus Metasequoia. In concert with the symposium and in honor of Dr. Miki's accomplishments, Dr. Minoru Tsukagoshi and OMNH staff prepared a special exhibit of Dr. Miki's publications, historic photographs, and type material of *Metasequoia* and Pinus trifolia.

As warned, the daytime temperature hovered around 38°C (100°F), with humidity levels making it feel significantly hotter. Fortunately, Japan is well airconditioned, so the weather conditions were generally tolerable. Meeting accommodations were arranged at The Association for Overseas Technical Scholarship, Kansai Kenshu Center (AOTS) and the rooms were comfortable and very reasonably priced. Relatively inexpensive meals (breakfast - \$7 US) could be purchased at the facility, but most participants took the opportunity to sample the multitude of Osaka's culinary delights. Transportation in and around Osaka was facilitated by the excellent and inexpensive subway and trains systems.

The symposium began on August 3 (Tuesday) with registration, an opportunity to walk through the botanical garden, and the much anticipated Welcome Reception. The Welcome Reception was in one word - spectacular. An unending supply of fabulous sushi, refreshments, and a stellar assortment of sake (complete with a tasting guide and sampling strategy) contributed to a warm

welcome by our hosts, lively discussion, and meeting new colleagues.

The meeting began the next morning and over the next two days twenty-six papers and fifteen posters were presented. The papers were grouped into five sessions that included: (1) *Metasequoia* and associated conifers in the Cenozoic; (2) Biology of the Taxodiaceae; (3) *Taxodioxylon* and the history of Taxodiaceous conifers; Taxodiaceous fossil forests in time and space; and (5) Conservation and the future of *Metasequoia*. Meeting details and presentations can be accessed at http://www.biology.tohoku.ac.jp/garden/meta/.



Figure 1

**Following** the meeting the group made its way through Osaka's subway system to Tenmabashi Wharf in the waterfront area. Here we boarded traditional Japanese boat and ate fine Japanese cuisine (Figure 1), while cruising Ohkawa River

for several hours. After dinner and several refreshments later karaoke was inevitable. It was truly and enjoyable evening as fun was had by all.

The field trip began Friday (August 6) morning and following a short drive we arrived at the Biwa Lake Museum. Our host Dr. Chiyomi Yamakawa proudly led us through the museum and introduced the participants to a reconstruction of a *Metasequoia* forest from the Plio-Pleistocene Kobiwako Group. Following lunch at the museum we were provided an opportunity to examine fossils collected from Echigawa Fossil Forest (Kobiwako Group) from localities along the Echi River, Higashiomi City, Shiga Prefecture (Yamakawa, 2008). In addition,

the type material of Wataria (Sterculiaceae) wood, which was described by Terada and Suzuki (1998), was available for study. Our first field stop was the Asakuni and Yoshinaga sites located on the banks of the Yasu River, Konan, Shiga Prefecture, where in situ stumps and compression fossils of a late Pliocene (Koka Formation, Kobiwako Group) fossil forest dominated by Metaseguoia Glyptostrobus were observed (Figure 2). Weekend traffic on a Friday afternoon rivals that seen on a holiday weekend in the US, and although traffic delays precluded our visit to Gifu Castle and traditional cormorant fishing that has a history that extends to the 8<sup>th</sup> Century in the Nagara River, Gifu Prefecture, we were treated to another lavish Japanese meal at the Harmonie Terrasse Wedding Hotel. The evening ended with a traditional Japanese bath and refreshments.



Figure 2

The next morning the group visited the Minokamo Fossil Forest Park, Minokamo, Gifu Prefecture where *in situ* permineralized *Wataria* stumps assigned to the Miocene Nakamura Formation could be observed along the shoreline of the Kiso River. The Hishiya opencast mine in Osusawa, Tokitsu, Gifu Prefecture was the next and perhaps the most anticipated stop on our field trip because it is one of Miki's (1941) type locations for *Metasequoia* (Figure 3). From these sediments assigned to the early late Miocene Tokiguchi Porcelain Clay Formation Miki described seed cones, seeds, leaves,

and twigs of M. disticha and seed cones of M. *japonica*. The group was able to prospect the quarry freely and numerous well preserved wood samples and specimens of Metasequoia and Pinus trifolia were collected. Our third and final stop of the day was at the Mizunami Fossil Museum, Mizunami, Gifu Prefecture. Museum staff had laid out hundreds of beautifully preserved compression fossils from the early to middle Miocene Mizunami Group that we were able to study and photograph. The day ended with a drive to our ryokan (hotel) in the Japanese Alps in Akasawa Natural Forest, Agematsu, Nagano Prefecture (Figure 4). Our hosts served us a fantastic regional Japanese meal that was followed again by refreshments and discussion outside on the deck. The higher elevation brought relief from the heat and quiet of the forest afforded us a great night sleep.



Figure 3

We were greeted the following morning with another superb breakfast that fortunately, we were able to work off with a hike through the *Chamaecyparis* forest. This forest is of considerable cultural significance because it provides the timber for the Ise Grand Shrine (which is rebuilt every 20 years) and in the 17<sup>th</sup> Century it provided the timber for construction of the castle as well as other buildings in the new capital Edo (Toyko). After several kilometers of hiking and several thousands of photographs the group boarded the bus for Tsumago, the last stop of the field trip. Tsumago is

a preserved and restored town along the Nakasendo Route that connected Tokyo and Kyoto through the montane part of the country. The town provided us an opportunity to load up on souvenirs and afforded a glimpse into how a 17<sup>th</sup> Century Japanese town would have appeared.



Figure 4

Our Japanese hosts did not disappoint and organized an excellently run meeting. Our most sincere thanks go out to Dr. Mitsuo Suzuki (Meeting Secretary General), Ms. Chaobudu Bai (meeting assistant), Dr. Arata Momohara (meeting and field trip leader), Dr. Harufumi Nishida (meeting), Dr. Shuichi Noshiro (meeting), Dr. Mutsuhiko Minaki (meeting), Dr. Ohyama (meeting), Dr. Atsushi Okubo (meeting), Dr. Kiyoaki Saito (meeting), Dr. Takeshi Saito (field trip), Dr. Akira Takahashi (meeting), Dr. Kazuo Terada (field trip), Dr. Minoru Tsukagoshi (meeting and field trip), Dr. Kazuhiko Uemura (meeting), Dr. Chiyomi Yamakawa (Biwa Lake Museum), as well as all of the students and assistants that helped in the effort. The immense success of this meeting was due entirely to their tireless dedication and resolve. Finally, organizers and participants extend a grateful thankyou to the Tokyo club, Expo '90 Foundation, and the Commemorative Organization for the Japan world Exposition '70 for their generous financial support.

As part of the business meeting, the organizing committee discussed a potential location to hold the 4<sup>th</sup> International *Metasequoia* Symposium. Although an exact location was not decided at this time, we all agreed that the next symposium would be held somewhere in Europe in 4 to 5 years time. However, in the meantime, the committee decided that the group would participate in the next IOP meeting in Tokyo (2012) by hosting a *Metasequoia* session. Participants were pleased with the idea of having an interim meeting and the prospect of seeing everyone in Europe in a few years.

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#### OTHER ITEMS OF INTEREST

## Nomenclature, typification and correct description of fossil plants

#### 1. Introduction

This note is the result of a talk given at the EPPC in Budapest in the summer of 2010. Every 6 years a new edition of the International Code of Botanical Nomenclature appears in an updated version made by the International Botanical Congress; the last one is the so-called Vienna Code (McNeill et al., 2006; here referred to as ICBN); nowadays the code is also online: <a href="http://ibot.sav.sk/icbn/main.htm">http://ibot.sav.sk/icbn/main.htm</a>, and can easily be consulted by all (palaeo)botanists.

In 1994, Punt already wrote a short note in which he gave guidelines for the correct description of new palaeobotanical taxa. Recently, a paper appeared dealing with the role of types in palaeobotanical nomenclature, a subject against which many mistakes are made in palaeobotanical literature (Kvaček, 2008). That paper, however, appeared in a journal that may not be as widespread as the IOP newsletter. Therefore, the aim of the present note is first of all to stipulate the most important rules for the correct description and naming of fossil plant taxa, and secondly to briefly

discuss the typification of the names of fossil plant species.

Two points for a good understanding of this note: It should be noticed that the rules as given below, apply to fossil plants. In some aspects, the rules for recent plants are different, e.g. in some situations, then an illustration can be a type. Moreover, in more rules than in the few in which we mentioned a date, a date exists in the ICBN. An example: in paragraph 2.3, we refer to Art. 38.1 and 38.2; rules that have to be taken into account from 1 January 1912 on and from 1 January 2001 on, respectively.

### 2. Correct description of new (fossil) plant taxa (genera, species) and new combinations

## 2.1 General rules for valid publication of names of taxa in the rank of genus or below (see Art. 32, 36.3 and 37 of the ICBN):

- the name must be accompanied by a description or diagnosis (or by a reference to a previously published description or diagnosis) (Art. 32.1d)
- a diagnosis of a taxon is a statement of that which in the opinion of its author distinguishes the taxon from other taxa (Art. 32.2)
- the description or diagnosis should be in Latin or English (Art. 36.3)
- the type of the name should be indicated (Art. 37)
- indication of the type must include one of the words 'typus' or 'holotypus', or its abbreviation, or its equivalent in a modern language (Art. 37.6).

## 2.2 Rules for the description of a new genus (see also Art.20 in the ICBN), in addition to the general rules mentioned above:

- *generic name* followed by the author's name(s) and *gen. nov.*
- for purposes of designation of the type of a generic name, mentioning of the *species name* alone suffices as reference to the type *specimen* (Art. 10.1)

#### Recommendations:

• etymology or derivation of name (*derivatio nominis*)

- the diagnosis should be concise and based on the most important characters only
- a discussion with comparison to other genera.

## 2.3 Rules for the description of a new species (see also Art. 23 and 38 in the ICBN), in addition to the general rules mentioned above:

The name of a species is a binary combination consisting of the name of the genus followed by a single specific epithet in the form of an adjective, a noun in the genitive, or a word in apposition, but not a phrase name of one or more descriptive nouns and associated adjectives in the ablative (Art. 23.1). If an epithet consists of two or more words, these are to be united or hyphenated.

The rules that should be dealt with for a new species:

- *species name* followed by the author's name(s) and *sp. nov*.
- an illustration or figure showing the essential characters, in addition to the description or diagnosis (or a reference to a previously published illustration or figure) (Art. 38.1)
- the type is a single specimen conserved in one herbarium or other collection or institution (Art. 8.1). See chapter 3 on typification.
- a specimen is (part of) a gathering of a single taxon made at one time; it may consist of multiple small plants (Art. 8.2) and it may be mounted as more than one preparation, as long as the parts are clearly labelled as being part of that same specimen (Art. 8.3)
- at least one of the validating illustrations must be identified as representing the type specimen (Art. 38.2)
- repository: specimen number and institution where it is deposited must be specified (Art. 37.7).

#### Recommendations:

• It is strongly recommended that the material on which the name of a taxon is based, especially the holotype, be deposited in a public collection with a policy of giving bona fide researchers access to deposited material, and that it be scrupulously conserved (ICBN Recommendation 7A.1).

- type locality and stratigraphic horizon from where the type specimen originates
- etymology or derivation of name (*derivatio nominis*)
- the diagnosis should be concise and based on the most important characters only
- the description should include all additional data of secondary importance (i.e. not included in the diagnosis), like measurements
- a discussion with comparison to other species; this should give the differential characters in which the new species differs from other species, at least in the same genus.

#### 2.4 Rules for a new combination:

A new combination is a combination formed from a previously published legitimate name and employing the same final epithet (Art. 7.4), e.g. the result of the transfer of a species to another (or new) genus.

Requirements for a new combination:

- name of the new combination followed by successively (if it concerns a species name): generic name plus epithet plus in parentheses the author's name(s) of the basionym plus the author's name(s) of the new combination, followed by comb. nov. (Art. 49.1)
- if the generic name is clear from the context, e.g. a preceding diagnosis with the name of a new genus, it may be abbreviated to its capital first character plus period
- the basionym has to be mentioned. A basionym is a previously published legitimate epithet-bringing synonym from which a new name is formed for a taxon of different rank or position
- for citation of the basionym a full and direct reference to its author and place of valid publication is required, with page or plate reference and date (Art. 33.4)
- this page reference is a reference to the page(s) on which the basionym was published, not to the pagination of the whole publication (Art. 33, Note 1)

#### Recommendations:

• diagnosis and reason for transfer

• an illustration is not necessary but always very useful!

#### 3. Typification (Art. 7-9)

A nomenclatural type (typus) is that element to which the name of a taxon is permanently attached, whether as the correct name or as a synonym. The nomenclatural type is not necessarily the most typical or representative element of a taxon (Art. 7.2).

The type (holotype, lectotype, or neotype) of a name of a species or infraspecific taxon is a single specimen conserved in one herbarium or other collection or institution (Art. 8.1). In fossil plants, the type always is a specimen. One whole specimen is to be considered as the nomenclatural type (Art. 8.5).

With respect to the designation of lectotypes, neotypes and epitypes, for purposes of priority, designation of a type is achieved only if the type is definitely accepted as such by the typifying author, if the type element is clearly indicated by direct citation including the term "type" (typus) or an equivalent, and, on or after 1 January 2001, if the typification statement includes the phrase "designated here" (hic designatus) or an equivalent (Art. 7.11).

#### **3.1 Holotype (Art. 9.1)**

A holotype is the one specimen used by the author, or designated by the author as the nomenclatural type. As long as the holotype is extant, it fixes the application of the name concerned.

For the indication of a holotype, see above under § 2.1 and 2.3.

#### **3.2 Isotype (Art. 9.3)**

An isotype is any duplicate of the holotype; it is always a specimen. In fossil plants it can only be applied when a number of small plant fragments are found together that clearly belong together but that are not attached to each other. So an isotype always comes from the same locality and collection as the holotype.

#### **3.3 Syntype (Art. 9.4)**

A syntype is any specimen cited in the protologue when there is no holotype, or any one of two or more specimens simultaneously designated as types (see Art. 37 note 1: When the type is indicated by reference to a gathering that consists of more than one specimen, those specimens are syntypes). The term is relevant for names published in old times when the type concept did not yet exist, and when authors occasionally cited and/or illustrated the specimens that they used. Example: In 1858 Bronn Phylladelphia strigata Bronn, described enigmatic leaf from the Triassic of Raibl, without indicating a holotype. He based his description on a number of specimens of which he figured two. These are the syntypes (see also Kustatscher & van Konijnenburg-van Cittert, 2008).

#### **3.4 Paratype (Art. 9.5)**

A paratype is a specimen cited in the protologue that is neither the holotype nor an isotype, nor one of the syntypes if two or more specimens were simultaneously designated as types. It usually provides information additional to the holotype. Example: *Scolopendrites grauvogelii* van Konijnenburg-van Cittert et al, 2006. Here the paratype gave details about the morphology of the sporangia and in situ spores, which were not available in the holotype.

N.B. In most cases in which no holotype was designated there will also be no paratypes, since all the cited specimens will be syntypes. However, when an author designated two or more specimens as types (Art. 9.4), any remaining cited specimens are paratypes and not syntypes.

N.B. Which specimen is the holotype, and which specimens are isotypes, syntypes and/or paratypes, can only be seen in the protologue, or derived from the protologue.

The protologue is everything associated with a name at its valid publication, i.e. description or diagnosis, illustrations, references, synonymy, geographical data, citation of specimens, discussion, and comments (Recommendation 8, footnote).

#### 3.5 Lectotype (Art. 9.2 and 9.10)

A lectotype is a specimen designated from the original material as the nomenclatural type, in conformity with Art. 9.9 and 9.10, if no holotype was indicated at the time of publication, or if it is missing, or if it is found to belong to more than one taxon.

In lectotype designation, an isotype must be chosen if such exists, or otherwise a syntype if such exists. If no isotype, syntype or isosyntype (duplicate of syntype) is extant, the lectotype must be chosen from among the paratypes if such exist. If no cited specimens exist, the lectotype must be chosen from among the uncited specimens, which comprise the remaining original material, if such exist. Examples: Stachyopitys preslii Schenk 1867: the syntypes in Schenk's publication were found to belong to two (Kirchner van Konijnenburg-van & Cittert, 1996); hence a lectotype had to be designated. For Scytophyllum waehneri (Stur) Kustatscher et al. nov. comb., only uncited specimens from the original material still existed. hence a lectotype had to be designated (see Kustatscher et al. (submitted)).

So, a lectotype always comes from the original material but is designated afterwards.

#### 3.6 Neotype (Art. 9.6 and 9.11)

A neotype is a specimen selected to serve as nomenclatural type if no original material is extant, or as long as it is missing. A lectotype always takes precedence over a neotype, with one exception: When a holotype or a previously designated lectotype has been lost or destroyed and it can be shown that all the other original material differs taxonomically from the destroyed type, a neotype may be selected to preserve the usage established by the previous typification (Art. 9.14). Example: All original material of *Pterophyllum brevipenne* Kurr ex Schenk was destroyed, hence a neotype had to be designated (Pott et al., 2007).

So, a neotype always comes from a later collection of material than described in the original publication, and is designated afterwards.

#### **3.7 Epitype (Art. 9.7)**

An epitype is a specimen selected to serve as an interpretative type when the holotype, lectotype, or

previously designated neotype, or all original material associated with a validly published name, is demonstrably ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon. When an epitype is designated, the holotype, lectotype, or neotype that the epitype supports must be explicitly cited, since it only has standing as long as that type is accepted. An epitype is often selected when additional information on a species becomes available later on, e.g., cuticle characters when so far only leaf gross morphology was known. Example: Bosma et al. (2009) designated an epitype for Aachenia debeyi Knobloch (a Late Cretaceous conifer cone scale assigned to the Doliostrobaceae), because it showed a preserved cuticle that was hitherto unknown, and that differentiated it from other taxa.

#### 3.8 Repository and terminology

Designation of a lectotype, neotype or epitype is only effected if full details of the specimen are given, including citation of the institution in which it is conserved. (Art. 9.19-9.20).

Lecto- or neotypification is not effected unless indicated by the use of the term 'lectotypus' or 'neotypus', its abbreviation, or its equivalent in a modern language (Art. 9.21).

#### 3.9 Rejection of typifications (Art. 9.16-9.18)

The designation of a lectotype, neotype or epitype corncerns a choice. If it can be proven that it was a bad choice, this typification may be superseded.

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#### Han van Konijnenburg-van Cittert and Gea Zijlstra

#### Acta Palaeobotanica celebrates 50 years

The first volume of Acta Palaeobotanica was published 50 years ago, in August 1960. Initiated and first edited by renowned Polish palaeobotanist Professor Władysław Szafer, this journal is one of only a few devoted primarily to paleobotany with topics including but not limited to palaeoecology, palaeophytogeography, palynology, systematics, and archaeobotany. During this half century, 433 papers by 371 authors (156 from Poland and 215 from abroad) have been published in the journal. Acta Palaeobotanica is indexed in: AGRO-LIBREX Database. Biological Abstracts (Thomson Reuters<sup>TM</sup>), **BIOSIS** Previews (Thomson Reuters<sup>TM</sup>), GeoRef, Index Copernicus, Polish Scientific Journals Contents (Life Sciences), SCOPUS (Elsevier), Thomson Reuters Master Journal List (Thomson Reuters<sup>TM</sup>), GEOBASE<sup>TM</sup> Geographical & Geological Abstracts.

The current editorial team in Krakow, including Leon Stuchlik (Editor-in-chief), Ewa Zastawniak (Vice Editor), and Anna Hrynowiecka-Czmielewska (Editorial assistant), deserve congratulations for their success in maintaining the quality and modern international standards of this journal. Acta Palaeobotanica is now an Open Access journal; currently full text of articles in the PDF format are freely accessible from volume 44 No. 2 (2004) onwards at

#### http://www.botany.pl/ibwyd/acta\_paleo/act-p.htm

The bound edition, available at relatively economical rates, features high quality paper with excellent image reproduction in color as well as black and white. From its inception, Acta Palaeobotanica was international in scope with articles published in various languages in addition to Polish. During the past decade the journal has transitioned to all-English format.

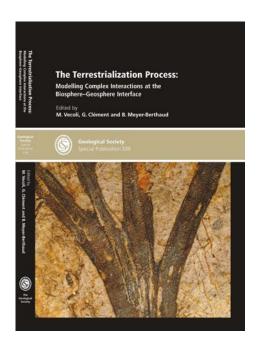
Acta Palaeobotanica is published regularly with two issues per year. In addition to the regular issues, the journal publishes occasional supplements including monographs, symposium volumes and Festschrifts. All manuscripts are peer-reviewed by at least two referees. After acceptance of corrected manuscripts,

printing time is approximately 6 months. We thank Leon Stuchlik for providing an overview of the history and current statistics on this journal.

#### **Steven Manchester and Peter Crane**

#### **BOOK ANNOUNCMENT**

The terrestrialization process: modelling complex interactions at the biosphere-geosphere interface



Co-edited by Marco Vecoli, Gaël Clément & Brigitte Meyer-Berthaud

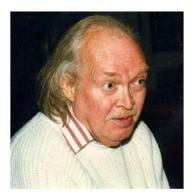
The book is available at the Geological Society of London website:

http://www.geolsoc.org.uk/gsl/publications/bookshop/page7936.html

#### **OBITUARIES**

### In memorian Donald Allan Eggert

1934 - 2010



It is with great sadness and regret that we report the passing of **Donald A. Eggert**, an extraordinarily botanist and plant paleontologist, and a dedicated teacher and mentor. Don was born in Cleveland, Ohio on May 13, 1934. He earned his bachelor's degree from Western Reserve University in 1956, and Ph.D. from Yale University in 1960. Following a postdoctoral fellowship at the University of Illinois, Don held positions at Southern Illinois University, the University of Iowa, and the University of Illinois at Chicago. He was an active member of the Paleobotanical Section of the Botanical Society of America, in which he served as Secretary/Treasurer from 1966-1968. After retiring from the University of Illinois, Don moved to Chesterton, Indiana, where he died on July 16, 2010 following a long illness.

creative Don's innovative and research revolutionized the study of Paleozoic vascular plants through the development of highly influential and innovative approaches that integrate the study of living and extinct species. Through his pioneering work on the Carboniferous arborescent Lycopsida (1961)and the Carboniferous arborescent Sphenopsida (1962), Don laid the conceptual groundwork for characterizing growth architecture for both living and fossil trees. Among his most influential works are the recognition and of extinct families characterization Pennsylvanian age filicalean ferns through the

reconstructions of *Sermaya* (Sermayaceae) and *Tedelia* (Tedeliaceae). Together with his students, Eggert demonstrated that it was possible to study microgametophyte development in ancient seed plants, and characterize the structure-function relationships of phloem and the vascular cambium. He also will be remembered for his broad ranging work that defined the homologies of rooting organs in arborescent lycopods, and for deciphering the underlying morpohological construction of complex seed fern pollen organs. His research was thorough, immaculate in detail, and standard setting in quality. A complete bibliography of Don's work is posted on the web at

#### http://oak.cats.ohiou.edu/~rothwell/Donald\_A\_%20 Eggert, Publications.html

Don was an extraordinarily dedicated and gifted paleobotanist. He also was a wonderful mentor and valued colleague, who will be remembered by all of us who were touched by his keen intellect and love of plants. His sharp wit and ability to see beyond the horizon created innumerable research areas and new ways of using and interpreting fossil plants. Those of us who benefited from his, friendship, guidance, and council will miss him greatly. Plant paleontology and evolutionary plant biology are far poorer for his loss.

#### Gar W. Rothwell, Ohio University

#### Thomas N. Taylor, University of Kansas

#### In memoriam Nicole Grambast-Fessard

**Nicole Grambast-Fessard** (1927-2010) passed away in Montpellier on August 10<sup>th</sup>, 2010. She was born in Paris and graduated from the *Ecole Normale Supérieure*, Paris. She joined the *Laboratoire de Biologie végétale de la Sorbonne* and the *Muséum National d'Histoire Naturelle* (*Anatomie comparée des Végétaux vivants et fossiles*) where she started her research on living and fossil plants. In 1953 her

first paper was dedicated to epidermal characters of present tropical Moraceae. However, the second paper, which she published together with Louis Grambast, concerned Tertiary charophytes. In 1961 she followed Louis Grambast when he created the Laboratoire de Morphologie végétale the Botanical Paléobotanique Institute, at University of Montpellier. She became an expert on Tertiary woods but, subsequently, she mainly published on fossil charophytes. Together with Louis Grambast's students she later continued the researches successfully developed in Montpellier on this group of algae. Nicole Grambast was an excessively discreet person, very efficient and helpful with administrative duties of the laboratory life. She retired in 1992 but continued to come to the laboratory for many years. Her last contribution, in collaboration with Monique Feist, was the volume Protista-Charophyta of the Treatise of Invertebrate Palaeontology published in 2005.

A number of reprints of her papers are still available upon request from <u>jean.galtier@cirad.fr</u>.

#### Jean Galtier, Montpellier

#### CHANGES OF ADDRESS

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