

Identification (by Neusa Tamaio, Marcelo Pace, and Veronica Angyalossy), Introduction to Dendrochronology (by Jochen Schöngart and Giuliano Locosselli), and Techniques in Wood Anatomy (by André Lima and Luiza Teixeira).

Wood Collections Satellite Meeting — After a successful round of presentations on Wood Collections in the session organized by Vera Coradin and Claudia Barros, a satellite meeting was scheduled to discuss common ambitions and problems experienced by the curators and users of wood collections. Important recommendations concerned the creation of a common protocol for sample registration in wood collections, including the quality of the samples in the records, promoting courses to teach how to upload images and information on the InsideWood website (Elisabeth Wheeler in charge), establishing collaborations with plant taxonomists to collect well identified wood specimens, and exchanging samples among wood collections to ensure their safety and availability. Participants in this workshop were: Alan Curtis (IWCS), Claudia Barros (RBw), Giuliano Locosselli (SPFw), Guilherme Freire (SPFw), Neusa Tamaio (RBw), Patrícia Soffiatti (UFPR), Raphael Pigozzo (BCTw), Regis Miller (MADw), Rivete Lima (UFPB), and Vera Coradin (LPFw).

2012 IAWA Pan-American Meeting Award-Winners — Seven students received awards for best posters or oral presentations:

Best posters: Larissa Chacón Dória (Undergraduate), Universidade Estadual Paulista (UNESP-Botucatu); Kelly C. Santos (Masters), Universidade do Estado do Rio de Janeiro (UERJ); Matheus Peres Chagas (Doctorate), Universidade de São Paulo (USP-Piracicaba); Vitor Barão, *outstanding poster* (Undergraduate), Universidade de São Paulo (USP-São Paulo).

Best talks: Carolina Bastos (Masters), Universidade de São Paulo (USP-São Paulo); Guilherme Freire (Doctorate), Universidade de São Paulo (USP-São Paulo); Marcelo Pace: *outstanding talk* (Doctorate), Universidade de São Paulo (USP-São Paulo).

In the end, after so much activity, exchange, talks, new plans for the future, and refreshing ideas to consider, most of us certainly left Recife with a feeling of fulfillment and at the same time a longing for the next meeting, looking forward for more novelties and for another opportunity to meet again with old and new friends.

Marcelo Pace, USP, São Paulo, Brazil

Report of the Arctic and Alpine Wood Anatomy Course 2012

Both arctic and alpine environments have many colors: violet and yellow for *Calluna vulgaris* and *Arnica alpina* flowers, blue for lakes, sea and the skies above valleys and glaciers, shades of green for forests and tundra, golden brown for larch trees in autumn, grey for rocks and scree, and white for snow and ice. During the Wood Anatomy in Arctic and Alpine Environments course, taught in Klosters Dorf, Switzerland, by Fritz Schweingruber, Holger Gärtner and Martin Hallinger on 19 to 25 August 2012, we mixed those colors harmoniously to paint a new picture of how plants can be used to understand the ecology of arctic and alpine ecosystems.

The effect of global warming on arctic and alpine environments is a current focus of botanical research and especially in the field of dendrochronology. This course offered a baseline for anatomical and dendroecological studies showing in detail the anatomical structure of arctic and alpine plants as well as their structural variability caused by environmental changes. The theoretical lessons were based on pre-prepared high quality permanent microscopic slides (one complete set of more than 300 slides for each participant). We began by learning basic wood anatomy focusing on the structure of shrubs, dwarf shrubs and herbs growing in the boreal, arctic, subalpine and alpine zones of the northern hemisphere. We also studied the anatomy and annual ring structures of long-living dwarf shrubs, *e.g.* various willows (*Salix* sp.), birches (*Betula* sp.), *Dryas*, and various Ericaceae. We then explored the anatomy of root collars and annual structures of herbs and cushion plants such as *Silene acaulis*, *Potentilla* sp., *Saxifraga* sp., *Taraxacum* etc. and many others.

On two excursions into the alpine and subalpine zone of the Alps (near Davos) we discussed sampling strategies to address research questions relating to climatology, ecology and changes of vegetation zones. Each participant learned and practised simple, but very effective techniques for preparing high quality permanent micro sections in a fully-equipped laboratory (microscopes, microtomes, chemicals). Every evening, after a delicious dinner, we presented our own projects, asking for advice on sampling techniques and the interpretation of our preliminary results. At the end of the week, all the participants returned to their home countries: Czech Republic, China, Finland, Germany, Iceland, Italy, Latvia, Nepal, Poland, Russia, Slovakia, and Switzerland.



Participants of an excursion in the (sub)alpine zone of the Alps.

In my opinion, we all shared an exciting week discovering new expertise in dendroecology. A particular highlight was collecting a *Rhododendron ferrugineum* growing on a north aspect at 2300 m above sea level in the Swiss Alps, cutting and staining a cross section from its root collar, looking at the sample under the microscope and discovering 120 annual rings. The adventure will continue after the end of the course, as we all bring back home our newly-found expertise in Arctic and Alpine Plant Anatomy.

Alan Crivellaro, University of Padova, Italy