

Minutes Psyllid training school

Monday, April 19th 2010

After presentation of the final workshop program and presentation of the participants, PD Dr. Daniel Burckhardt gave a comprehensive and informative introduction into taxonomy, systematics, biology, host plant relationships and biogeography of psyllids. In a first practical session in the afternoon attendees could identify their own psyllid material using identification keys designed and explained by D. Burckhardt with the help of the trainers Daniel Burckhardt, Nicolas Sauvion and Barbara Jarausch.

Tuesday, April 20th 2010

Welcome of the participants by the head of the institute, Prof Gabi Krczal, and overview on the activities of AIPlanta-IPR. During the following visit Barbara Jarausch and Wolfgang Jarausch demonstrated the insectarium of AIPlanta and particularly explained the implementation of psyllid rearings and the layout of transmission trials. Within a second practical identification session in the afternoon attendees could continue with identification of their own material and could start with an exercise designed by Barbara and Wolfgang Jarausch to study determination.

Wednesday, 21st 2010

A field excursion to orchards in the surroundings of Neustadt was conducted to collect psyllid species from different fruit crops and from wild host plant locations by testing different trapping methods. The material was stored at -20°C until the next day for identification by morphological means. In the afternoon different trapping and conservation methods of psyllids were discussed and various documents (liste of references, pdf of articles, morphological plates) were provided while finishing with the previous identification exercise.

Thursday, 22nd 2010

Thursday was dedicated to molecular analysis. Thus, the session started with extraction of total DNA from psyllids using the CTAB protocol in its modified version by Wolfgang Jarausch. With the freshly extracted DNA, different PCR reactions were run with newly developed, unpublished primers in order to validate their use as molecular markers for psyllid identification.

Friday, April 23rd 2010

Molecular analysis was finished with gel electrophoresis of PCR products and documentation. Thus, the primers for molecular identification of *Cacopsylla melanoneura*, *C. affinis* (both developed by Rosemarie Tedeschi) and of *C. picta* (developed by Wolfgang Jarausch) proved to be specific. The workshop was closed with a final discussion of results and an outlook for the use of these results for following activities of WG2.

