

Conference Report

Seventy years of Tobacco Research at the Landesanstalt für Pflanzenbau in Forchheim (Forchheim Institute of Plant Cultivation)

H.-J. Eberhardt

Verband der Cigarettenindustrie
Königswinterer Straße 550
D-53227 Bonn

In June 1997, the Landesanstalt für Pflanzenbau (LAP) Forchheim celebrated a festive colloquium attended by a large number of guests. The reasons for the celebration were the 70th anniversary of the Landesanstalt and the 75th birthday of the former Director Professor J A Schmidt who was responsible for managing and coordinating the Institute for 17 years until 1987. Dr Schweiger, who took over as Director of the LAP in 1987 gave a review of the Institute's eventful history, its various tasks and achievements in breeding new tobacco varieties as well as in tobacco plant research.

A period of far reaching changes began with the German reunification after the Dresden Tobacco Institute in the former GDR was closed down and all research work on tobacco was moved to the Forchheim Institute.

The current activities of the LAP centre primarily on breeding tobacco varieties with improved resistance to diseases and higher yields, with increasing emphasis on international cooperation at the EU level. Research work in this respect is carried out and coordinated by Dr Billenkamp who is responsible for tobacco breeding.

In his speech Dr. Billenkamp paid particular attention to the problems which arise in crossbreeding tobacco plants to obtain improved properties. The tobacco breeders of the Forchheim Institute already achieved a success in 1993 when new varieties are pending or planned.

The significance of the surface constituents of the tobacco leaf in breeding aromatic varieties was the subject of Dr Eberhardt's (VdC) presentation. Over the

years there have been strong indications that a whole range of key substances which account for the flavour and aroma of the tobacco leaf derive from its cuticular surface layer. These are for the most part terpene compounds, such as duvanes or labdanes, but esterified sugars such as sucrose esters can also contribute to the formation of a special aroma in tobacco smoke. The possibility of utilizing these interesting classes of compounds in the cultivation of new aromatic tobacco varieties was outlined and discussed. Moreover, duvane, labdane and sucrose ester derivatives possess insecticidal properties which recommend them even more for inclusion in future plans for the breeding of new varieties.

H. Pfanger from the Federal Association of German Tobacco Growers described 'The Growers' concerns and their evaluation of the present situation' and presented several problems and issues currently facing tobacco growers in Germany. These problems include the issue of how to control sucker growth in tobacco plants. Although agrochemicals which inhibit sucker growth are employed in many EU countries, they are not approved for use on tobacco plants in Germany. One way out of this dilemma might possibly be offered by the forthcoming harmonization of plant protection legislation under EU regulations. However, it remains to be seen to what extent these new regulations will take account of sucker growth inhibitors in tobacco cultivation.