

Deutscher Tropentag, October 11-13, 2005, Hohenheim

"The Global Food & Product Chain— Dynamics, Innovations, Conflicts, Strategies"

Proposal for Codification of the Phenological Cycle of Edible Musaceae

UWE MEIER¹, RODOLFO GONZALES², CARLOS RUIZ-SILVERA³

¹Federal Biological Research Centre for Agriculture and Forestry (BBA), Institute for Plant Protection in Horticulture, Germany ²Research International S. S., Costa Rica

³Fundación Polar, Programa Agricultura Tropical Sostenible, Venezuela

Abstract

The exchange of new findings and joint work on projects presuppose, however, that all those involved have the same understanding of the terms they use. This calls the need for an extensively standardised description of plant development stages in order of their phenological characteristics and their coding.

The phenological development stages of plants are used in agricultural science and practice worldwide, agro-meteorology in the field of phenologic observer and climatic research, each with its own varying individual objectives. This system, called BBCH coding system (BBCH = Biologische Bundesanstalt, Bundessortenamt, Chemical Industry), might help to determine adequate periods for crop and production management in different geographic regions and to collect information during the growth of the plant with the aid of development indicators. So the BBCH coding system is a system for uniform coding of phenologically similar growth stages of all mono- and dicotyledonous plant species. Of particular significance is the fact that the work appears in four languages and thus contributes to a large extent to reducing linguistic communication problems. It thus fulfils in a special way the intertwinement in research, trade, production and service present today. Please find the BBCH coding system with 50 crops and weed species under http://www.bba.de/veroeff/bbch/bbch.htm.

The BBCH code proposal for phenological development of Musaceae is presented on the basis of the BBCH-Scale were defined in ten principal growth stages (macro stages). Every principal growth stage was subdivided into secondary growth stages (micro stages) and some was subdivided if necessary into tertiary growth stages (meso stages). If necessary it is possible to use in edible Musaceae four stages.

Keywords: Bananas, BBCH, Growth stages, Musaceae

Contact Address: Uwe Meier, Federal Biological Research Centre for Agriculture and Forestry (BBA), Institute for Plant Protection in Horticulture, Messeweg 11/12, 38104 Braunschweig, Germany, e-mail: u.meier@bba.de