Variety research and interaction with crop husbandry and breeding

Johan Van Waes

Ministry of the Flemish Community- Department Agriculture & Fisheries, Institute for Agricultural and Fisheries Research – Direction, Burg. Van Gansberghelaan 96 box 1, 9820 Merelbeke, Belgium, (e-mail: johan.vanwaes@ilvo.vlaanderen.be)

Abstract
The aim of plant breeding is to create new varieties and to commercialize them as soon as possible. However in the European Community, a new variety of an agricultural crop must submit official trials for DUS (Distinctness, Uniformity, Stability) and VCU (Value for Cultivation and Use) before commercialisation. In Europe the VCU (testing agronomical and technological value) is organised at national level while for a lot of crops DUS (judging morphological characteristics) is organised by bilateral agreements.
Different aspects are important in the VCU evaluation procedure. Variety research has a close interaction with agricultural practice and breeding. So the evaluation criteria must be based on the most important characteristics for the agricultural practice. On the basis of criteria for release of new varieties, variety research can contribute to a sustainable and biological agriculture and/or anticipate on new situations or be ahead of new quality criteria. Before incorporation of new criteria their impact on variety release has to be studied.
In this article different aspects of the VCU – testing procedure with maize and the interaction of Variety Testing and Crop Husbandry research will be discussed.

Key words: crop husbandry, maize, variety testing, breeding