VT Stage in Corn: A Functional Definition. (C02-wilhelm172101-Poster)

Authors:

- W.W.Wilhelm* USDA-ARS, Lincoln, NE
- K.Ruwe USDA-ARS, Lincoln, NE

Abstract:

Ritchie et al. published one of the most widely used scales describing corn (Zea mays L.) development (How a Corn Plant Develops, Special Report No. 48, Iowa State University, Ames, Iowa). The scale divides the developmental sequence of corn into two broad sets, vegetative (designated as V-stages) and reproductive (designated as R-stages). The transitional stage between the V and R stages is VT, tasseling, which is defined as the tassel fully emerged from the ligule of the upper-most leaf and silks are not visible. If any silks are visible, the plant is appropriately staged R1 (anthesis of the female flower). Unfortunately, plants frequently have silks visible, and pollen being extruded from the anthers, before the tassel fully emerges resulting in no stage formally recognizing anthesis of the male flower. We propose adding a stage, VA (defined as the time when pollen is first shed from the tassel). This stage, under normal development of corn, would occur before VT and R1. In addition to resolving the plant staging dilemma that occurs when pollen is shed (or silks emerge) before the tassel is fully extended, the VA stage would formally recognize anthesis of the male flower.

Corresponding Author Information:

Wally Wilhelm phone: 402-472-1512 USDA-ARS fax: 402-472-0516

117 Keim Hall - UNL e-mail: wwilhelm1@unl.edu

Lincoln, NE 68583-0934

Presentation Information:

Presentation Date: Monday, November 11, 2002

Presentation Time: 4:00-6:00 pm Poster Board Number: 1232R

Keywords:

corn, developmental stage, anthesis