

Ontario Modified Corn Growth Stages for WBC Observations

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The same corn plant may be in more than one of these stages. Please indicate all stages that best represent the plant. If visiting the same plant each week, mark the 5th leaf so that as the bottom leaves start to disappear, you will still be able to accurately provide leaf count.

Stage	Description
Vegetative Stages	
VE	Emergence (no leaf collar)
V1...V14 etc.	Using leaf collar method* (see below) – indicate how many leaf collars are visible. V1 would have one leaf collar visible.
Whorl/Tasseling Stages	
VT1	Tassel can be felt inside whorl but has not emerged yet
VT2	Tassel peaking out of whorl
VT3	Full tassel spike extension
VT4	Full tassel emerged and branches extended
Silking and Pollen Stages	
R1	Silking: first emergence of silks from ear tips
R1.2	Tassel is shedding pollen
R1.3	Entire tassel shedding pollen (anther exsertion throughout tassel – see picture below)
R1.4	50% of the anthers drying out/spent or turning to a brown colour
Kernel Stages	
R2	Blister: developing kernels are whitish "blisters" on the cob and contain abundant clear fluid. The ear silks are mostly brown and drying rapidly
R3	Milk: the kernels are mostly yellow and contain "milky" white fluid.
R4	Dough: the kernel's milky inner fluid is changing to a "doughy" consistency as starch accumulation continues in the endosperm.
R5	Dent: all or nearly all of the kernels are denting near their crowns.
R6	Maturity: All kernels have reached their maximum dry matter accumulation now since the starch layer has moved completely to the cob. A black or brown layer will be visible at the base of each kernel.

***Leaf Collar method:** used extensively in the U.S., refers to the leaf collar being visible. The leaf collar is the light green-to-whitish band that separates the leaf blade from the leaf sheath, which wraps around the stem. The stages for corn are referred to as V1, V2, V3, etc., where the V3 stage is a plant with three collars visible.

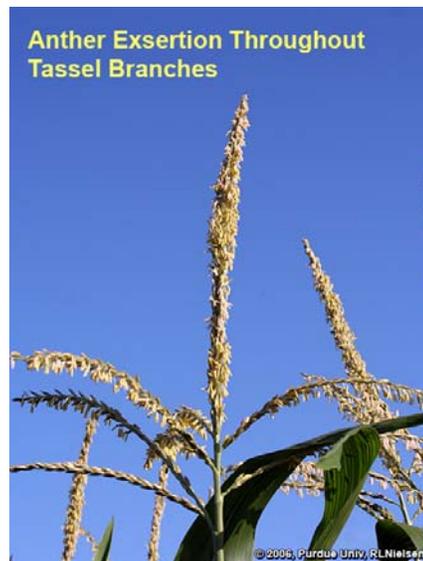


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