



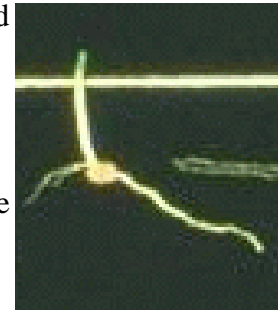
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## Identifying Corn Growth Stages - Vegetative

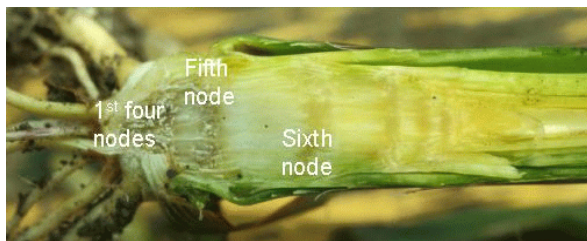
Bill Wiebold

Identifying stage of development is essential for proper diagnosis of corn pests or other problems and to determine the effect of these stresses on yield. Unfortunately, no standard method of staging corn development has been agreed upon by all crop advisers. The following method was developed by Iowa State University and is followed by most extension specialists and research scientists. To avoid confusion it is important to include a description of the stage along with letter/numeral designation. When attempting to determine a stage be sure to observe plants throughout the field because variation occurs within any field. A stage occurs for a field or sample when 50% of the plants are at the stage in question.

Corn development is divided into vegetative (V) and reproductive (R) stages. Subdivisions of the vegetative stages are designated numerically as V1, V2, etc., except for the first and last stages, VE and VT. VE designates emergence and occurs when the mesocotyl and coleoptile elongate together so that the coleoptile emerges above the soil surface (Fig. 1).



Each leaf stage is defined according to the uppermost leaf whose leaf collar is visible. Corn leaves consist of a sheath that attaches the leaf to the stem and a blade. The junction between the sheath and the blade is the collar (Fig 2.). Beginning about V6 increased stalk size tear lower leaves from the plant. To determine leaf stage, split the lower stalk. The node directly above the first elongated internode is usually the fifth leaf node



(Fig 3.) Use this node as a reference for counting nodes and leaves.

The last vegetative stage is VT and occurs when the last tassel branch is completely visible.

