

Brown Midrib & Photoperiod Traits 04/15/09 3:21:53 PM

Brown Midrib



The name brown midrib comes from the brownish color in the midrib of the leaf and at the base of the plants internodes. The brown midrib trait in forages reduces the indigestible lignin component in the plants cells. This reduction of lignin makes for higher digestible proteins and lower neutral and acid detegent fiber, resulting in higher digestible nutrients. Obviously, higher digestible nutrients equates to more milk or beef production.

Photo Period Sensitive Forages

The growth of a photo period sensitive plant is determined by day length, not by a set number of days from planting. Photo period sensitive plants require 12 hours and 20 minutes of sunlight and a 60 to 65 degree soil temperature at the time of planting. In the fall, when day length decreases to less than 12 hours and 20 minutes these plants will begin forming a seed head, but, until then, they will remain in the vegetative stage of growth. It is not uncommon for photo period sensitive plants to have 21+ leaves at the time of harvest. If planted in spring, it is



possible to have up to 180 growing days. This delay in maturing allows for multiple cuttings and widens the harvest window, allowing the grower to harvest at their convenience. Conventional forages begin to set a seed head in 60-65 days from the date planted. As it sets a seed head, the nutritional value of the plant begins to decline day by day. To insure a quality crop, harvest must be made in narrow time frame, usually in 14 days or less. There are a number of reasons a timely harvest may be delayed and with each passing day, the nutritional value of the crop decreases.