

Identification of Cutout

Bill Robertson

Cutout, or the end of the effective fruiting period, is typically defined as the date $NAWF=5$. Just because $NAWF$ values fall below five doesn't necessarily mean the field has reached cutout. It is not unusual for $NAWF$ values to flatten out toward the end of the season. When $NAWF$ values run flat the plant is basically putting on a new node at the same rate flowering is moving up the plant. This can happen in response to fruit shed, excellent soil moisture and fertility levels, and/or a break in high daytime temperatures. However, it is a challenge for the plant to exhibit flat $NAWF$ values when the number of squaring nodes is less than five with a good fruit load. Once the energy demands of the plant significantly exceed what is being produced, a distinct drop in $NAWF$ values will be observed. It is this drop that signals the end of the effective fruiting window. The latest possible cutout date for your area should be observed regardless of the $NAWF$ value at that time.

Monitoring the progression of $NAWF$ from first flower best identifies the end of the effective fruiting window or cutout. It is difficult to accurately determine cutout from limited samplings at or near cutout. It is essentially impossible to determine the date of cutout when $NAWF$ values drop below five because the plant develops nodes at a different rate than flowering progresses up the plant. End of season management decisions should be based on accumulation of heat units or DD60s beyond cutout. However, counting the total number of nodes at cutout can help identify the approximate position of the last effective boll population when defoliation decisions are being made.