

OK, TX (EXCEPT RIO GRANDE VALLEY) - LATE SEASON APPLICATION

General Information

GENERAL INFORMATION

MepStar is a foliar applied plant regulator for use on cotton. MepStar allows growers to manage the cotton plant for short-season production leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. Benefits obtained from the use of MepStar include less boll rot, improved defoliation, reduced plant height providing a more open canopy, increased early boll retention and/or larger bolls, less trash and lower ginning costs, better harvest efficiency and a darker leaf cooler. These benefits often favorably influence the yield potential of the cotton plant.

Spray Coverage

Water is the recommended diluent under most circumstances, however, oil is permitted in the following states for ultra low volume (ULV) aerial applications: Alabama, Arkansas, Florida, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee and Texas. Refer to the Air and Ground Application sections for recommended spray volumes. Thorough coverage of the cotton foliage is required regardless of the application method or gallonage of application used.

APPLICATION INSTRUCTIONS

Early Application

On both short-staple and Pima cotton, growers have the option of low-rate multiple applications (see Table 1) or higher, less frequent dosages (see Table 2). These options provide maximum flexibility under a variety of growing conditions. The multiple application method gives the grower the ability to discontinue using MepStar if any significant stresses occur after an earlier application. If the stress is relieved, the grower has the option of continuing treatments.

In addition, the rate and timing ranges indicated in the "Application Rates and

Timings Tables” enable the grower to tailor usage of MepStar based on the degree of vegetative vigor in a given field. MepStar may be tank mixed with insecticides, miticides or foliar fertilizers when application timings coincide (Refer to the “General Restrictions and Limitations” section of the label).

Fields should be carefully scouted. MepStar should not be applied if plants are under any form of stress. In the absence of stress, a maximum of 5 low rate applications can be made each season. The first application may be applied at matchhead square in the absence of stress. The rate and timing of subsequent applications will depend on vegetative vigor. Additional treatments should be made at 7-14 day intervals under good growing conditions.

However, if excessive growth is observed at any time, higher rates of MepStar can be used.

If insect pressure or other stresses have caused early and significant loss of squares or young bolls, and these stresses have been alleviated, the need for MepStar is increased since excess vegetative growth is likely due to poor fruit loading.

Late Season Application

Certain benefits to cotton can be obtained by a late application of MepStar (approximately during the fourth to sixth week of blooming). However, a late season application should not and does not substitute for early season use – the time of greatest benefit from the use of MepStar. Late season application can lead to one or more of the following:

- Better defoliation
- Earlier maturity
- Reduction in late season vegetative growth or regrowth after cutout or defoliation
- More complete and manageable cutout
- Reduction in trash
- Lower ginning costs.

Some of these effects may favorably influence cotton yield potential and fiber quality. A late season application of MepStar should only be applied if fields are not

drought or nutrient stressed. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

Timing for Late Season Applications

Fields where cotton cuts out and then starts regrowth: Apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This application time often, but not always, corresponds to 5 - 6 weeks after first bloom.

Fields where cotton never completely cuts out: Apply MepStar when there are 4 - 6 nodes above the white flower (NAWF). NAWF is measured by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. The NAWF generally reaches 4 - 6 nodes during the fourth to sixth week of bloom.

During this time, the NAWF should be decreasing about one node every 5 - 6 days - if its rate of decrease is less, the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5 - 6, apply MepStar.

Air Application

Spray Volume

Water as Diluent: In all states except California, use a minimum of 2 gallons of water per acre. In California, use a minimum of 5 gallons per acre.

Oil as Diluent: Use a minimum of 1 quart of oil per acre. When oil is used as a diluent, the oil concentrate must contain either a petroleum or vegetable oil base and must be nonphytotoxic, contain only EPA exempt ingredients, provide good mixing quality in the jar test and be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank.

Do not apply MepStar ULV without using emulsifiers. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see "Compatibility Test for Mix Components".

GROUND APPLICATION

SPRAY VOLUME

Water as Diluent: In all states except California, use a minimum of 2 gallons of water per acre. In California, use a minimum of 5 gallons per acre.

GENERAL RESTRICTIONS AND LIMITATIONS

- Maximum seasonal use rate: Do not apply more than a total of 48 fluid ounces (3 pints) of MepStar (0.132 pound a.i.) per acre, per season.
- The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pound of mepiquat chloride per acre per season.
- Do not plant another crop within 75 days of last treatment.
- Stress: Do not apply to cotton plants under severe stress. If using the low-rate multiple option, discontinue use until the stress is alleviated. Do not apply a single application of 8 -16 fluid ounces of MepStar to cotton that is stressed due to lack of soil moisture.
- Do not graze or feed cotton forage to livestock.
- Do not apply through any type of irrigation equipment.

Limitations, Restrictions, and Exceptions

Application Timing

Late Season Application Use Rate

The lower rate should be used on cotton with only moderate additional growth potential, and the higher rate on fields likely to continue vigorous growth.

Livestock Grazing or Feeding: No

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

30 days

Rates

[field_rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[Late season](#)