

Pyrithiobac

Trade Name: Staple

Chemical Family: Benzoate

Mode of Action: Inhibition of acetolactate synthase (ALS), preventing production of the branched-chain amino acids valine, leucine, and isoleucine.

General Symptoms: Terminal inhibition, stunting, and yellowing in broadleaves. Yellowing, purpling, and reddening of grasses.



Figure 1

Figure 1. Soybean injury at 6 days after treatment with 0.083 lb ai/A pyrithiobac applied at the V6 growth stage. Note the yellowing in the terminals and the purple veination. Similar terminal yellowing could be caused by drift rates of glyphosate or other ALS inhibitors such as nicosulfuron (Accent) and primisulfuron (Beacon). Severe stunting and some stand loss will occur at this rate, and grain yield may be substantially reduced.

Agronomic Use: Pyrithiobac can be applied preemergence or postemergence in cotton for control of many broadleaf weeds and suppression or control some grass species.

Additional Information: Addition of a non-ionic surfactant will improve weed control. Mainly effective on pigweed and morningglory species, but small weeds at application is critical to successful control.

Rotational Restrictions: Cotton can be replanted immediately following crop failure. Wheat can be planted 4 months after application; field corn 9 months after application; and soybeans, peanuts, and tobacco 10 months after application (see label).

Symptoms on other Crops:



Figure 2

Figure 2. Corn injury at 10 days after an application of pyriithiobac. Symptoms include plant stunting, leaf yellowing and purpling of the midvein, followed by leaf necrosis. A misapplication will result in plant death.

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