THE EFFECT OF CGA-362622 APPLICATIONS ON WEED CONTROL AND COTTON YIELD

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Abstract

CGA 362622 is a new sulfonylurea herbicide being developed by Syngenta for post-emergence weed control in cotton. The proposed ISO name is Trifloxysulfuron Sodium, the current formulation is a 75 WDG, and the mode of action is ALS inhibition. CGA 362622 controls a wide spectrum of broadleaf weeds, a few grasses, and sedges. The use rates of CGA 362622 are extremely low, between 0.1 – 0.25 oz/A in cotton. CGA 362622 can be applied over the top of cotton at the early post application timing, (maximum of 0.1 oz/A, minimum of 3 leaf cotton), as well as post directed at the post, late post, and lay by application timings, (maximum of 0.25 oz/A). No more than 0.4 oz/A may be applied per season. CGA-362622 will be approved for use on conventional, RR, and BXN cotton.

CGA 362622 controls many of the most troublesome weeds in cotton. Weeds controlled include redroot pigweed (*Amaranthus retroflexus*), common cocklebur (*Xanthium strumarium*), coffee senna (*Cassia occidentalis*), sicklepod (*Senna obtusifolia*), hemp sesbania (*Sesbania exaltata*), pitted morningglory (*Ipomoea lacunosa*), and ivyleaf morningglory (*Ipomoea hederacea*). Suppression of yellow nutsedge (*Cyperus esculentus*), and purple nutsedge (*Cyperus rotundus*), is achieved with a single application and control of yellow nutsedge is achieved with a sequential application of CGA 362622. CGA 362622 controls both small and large weeds in cotton. Initial crop response in cotton can be 13% or less following an early post application of CGA 362622, (0.1 oz/A), and 6% or less with all directed application timings, but is gone within 14 days after application under normal growing conditions. Cotton yields have not been affected by applications of CGA 362622.