

BAS 320 I: A NEW INSECTICIDE FOR CONTROL OF KEY INSECT PESTS IN COTTON**Thomas E. Anderson, A.C. Everson and R. A. Farlow****BASF Corp.****Research Triangle Park, NC****Abstract**

Metaflumizone is a high performance insecticide, which was submitted for crop registration approval in the USA in 2004. Metaflumizone has key competitive advantages over other insecticides due to its favorable toxicology and environmental profile which includes low risk to applicators and handlers, beneficial insects, pollinators and other non-target species. Metaflumizone also possesses a novel mode of action, representing a new class of chemistry (semicarbazone), making it an ideal candidate insecticide for insect resistance management. Key crop segments will include cotton, and also potatoes, fruiting and leafy vegetables, and cole crops. Laboratory tests on its potency have shown that Metaflumizone has excellent activity on both pyrethroid-resistant and susceptible strains of *H. virescens*, *P. xylostella*, and *S. litura*. Extensive field trials demonstrate excellent activity against *Heliothis* sp., *Helicoverpa* sp., *Spodoptera* sp., and other lepidopteran and coleopteran pests of cotton. Metaflumizone is also active against *Lygus* sp.