WEED CONTROL PERFORMANCE OF KIH-485 PLUS ATRAZINE IN CORN. Hisashi Honda, Masanori Kobayashi, Junichi Watanabe, Yoshihiro Yamaji, and Ryo Hanai, Kumiai Chemical Industry Co., Ltd., Tokyo, Japan. Peter J. Porpiglia and Osamu Watanabe, Kumiai America, White Plains, NY.

KIH-485 is being developed primarily as a pre-emergence herbicide but with flexible application timings in corn and other crops. While KIH-485 provides good efficacy on grasses and broadleaf weeds; KIH-485 alone does not always provide complete efficacy against velvetleaf (*Abutilon theophrasti*), ragweed (*Ambrosia* spp.) and smartweed (*Polygonum* spp.) or other broadleaf weeds. Compatibility of KIH-485 (WG, SC) with atrazine (WG, L) was generally complimentary and has exhibited synergistic efficacy on velvetleaf in greenhouse trials. In field trials, pre-mixed formulations of KIH-485 + atrazine (WG) have exhibited good efficacy as a total pre-emergence herbicide. This combination should provide complete control of many typical corn-belt weed species. For example, it is appears that 209 g/ha of KIH-485 plus 1336 g/ha of atrazine has good, broad-spectrum efficacy as a standard premix product and specifically better efficacy on velvetleaf and Pennsylvania smartweed (*Polygonum pensylvanicum*) than either product alone. Based on our results, KIH-485 plus atrazine has the potential to become another viable option for corn production.

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