

2007 Harvest-Aid Chemical Update

Dr. Randy Boman Professor and Texas Cooperative Extension Agronomist-Cotton

Dr. Mark Kelley Extension Program Specialist-Cotton

Since we will have many fields moving rapidly toward maturity, questions will soon be forthcoming concerning harvest aid materials. We have some new harvest-aid products in the market in 2006. One includes Blizzard from Chemtura. Blizzard is a PPO inhibitor material and is in the same family with products such as ET, Aim, and Resource (which was new in 2006). Dr. Wayne Keeling and Dr. Mark Kelley conducted research trials with Blizzard in the High Plains for the past several years. The product seemed to perform similarly to others in the PPO inhibitor chemistry in those years.

Gramoxone Max is now out of the market and Gramoxone Inteon has replaced it. Paraquat is the active ingredient in both formulations. The most important change noted is the in pounds of active ingredient per gallon. Gramoxone Max was a 3 lb/gallon formulation, whereas the Gramoxone Inteon is 2 lb/gallon. The Gramoxone Inteon is much more "applicator friendly" formulation. Since we have become accustomed to the higher 3 lb/gallon formulation of Gramoxone Max, we need to carefully scrutinize the rates of Gramoxone Inteon. We have generated a conversion table that provides equivalent active ingredient rates in Ib/acre for Gramoxone Inteon and Firestorm (see below). We have a 24(c) Special Local Needs (SLN) label for the Gramoxone Inteon formulation from the Texas Department of Agriculture (TDA). This SLN has approved higher use rates for desiccation of stripper harvested cotton in most counties in Texas.

We received notification on September 14, 2006 that Chemtura Corporation received EPA registration for a 3-lb/gallon paraquat formulation. This was received after the 2006 High Plains and Northern Rolling Plains Cotton Harvest-Aid Guide was updated. This formulation contains the same amount of paraquat active ingredient as the old Gramoxone Max. Firestorm currently has a maximum use rate of 21 oz/acre per acre. We will be working with Firestorm to acquire necessary data for TDA to obtain a 24(c) Special Local Needs (SLN) label for stripper harvested cotton in most counties in Texas. It is anticipated that by 2008 this SLN label will be available for Firestorm.

DuPont has removed CottonQuik from the market and replaced it with a new formulation called FirstPick. The active ingredient concentration is the same for both materials (58.6% AMADS; 18.3% or 2.28 lb/gallon ethephon; and 23.1% inert ingredients). The formulation change is described as a "water soluble emulsifiable concentrate (EC) that has reduced corrosivity and different surfactants." FirstPick performed similarly to CottonQuik in 2005 High Plains research trials.

GRAMOXONE INTEON (2 LB/GALLON)		FIRESTORM (3 LB/GALLON)	
Product Oz / Acre	Acres/Gal	Product Oz / Acre	Acres/Gal
4	32	2.6	48
8	16	5.3	24
12	10.7	8	16
16	8	10.7	12
24	5.3	16	8
32	4	21.3 (maximum use rate of Firestorm)	6
48	2.7	Firestorm not labeled	

Conversion Table for Gramoxone Inteon and Firestorm for Equivalent Paraquat Active Ingredient Rates