

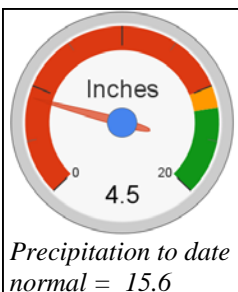
Northwest Plains Pest Management News

Volume 10 Issue 15

Bailey and Parmer Counties

October 6, 2011

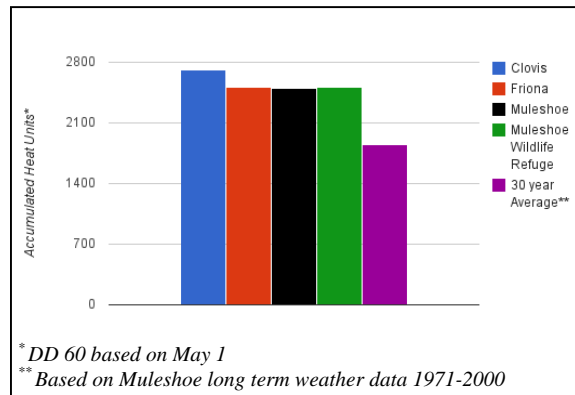
Harvest operations continue in area corn fields and have begun in a few cotton patches. Corn yields have been disappointing for the most part but a few fields have actually produced remarkably well considering the environmental conditions during the growing season. Extreme temperatures have taken their toll and, in addition, little precipitation was



received to offset the additional moisture demands caused by the extreme temperatures. Reported grain yields have ranged from near 40 bu/acre to a few exceeding 230 bu/acre; yield reports most often

fall into a range between 90 and 135 bu/acre. To put these numbers into perspective, the Parmer County average corn yield in 2009 was 217 bu/acre.

Cotton harvest has kicked off but not on a large scale. Cotton harvest aids are being applied to condition the area cotton for harvest. Using the accumulated heat unit method to determine boll maturity any boll



which bloomed before Aug 8 has accumulated 850 heat units and is considered fully mature. One caveat to this method is that it assumes normal crop development; plants under extreme drought stress may not develop at the generally expected pace. Nodes above upper most cracked boll (NACB) have ranged from less than 2 to over 7. Cotton is considered ready for a harvest aid application when NACB reaches 4. The following harvest aid information was taken from the Texas AgriLife Extension Service “2011 High Plains and Northern Rolling Plains Cotton Harvest-Aid Guide” prepared by Dr. Mark Kelly, et al.

Potential Weekly Water Use*	
Crop/Stage	Inches per week
Wheat	.63
Sorghum soft dough	1.20

*Weekly estimated crop water demands (inches of water per week) during the week ending Oct 5 based on PET data from Lubbock.

****Special Announcement****
The Texas Department of Agriculture regulates the shipment of certain cotton products and equipment traveling from quarantined areas in the state. There is a danger of reintroducing the boll weevil into eradicated areas by moving items such as gin waste and cotton burrs into eradicated areas. For more information contact Dr. Robert Crocker, TDA, 512-463-6332

**2011 HIGH PLAINS COTTON HARVEST-AID DECISION TABLE
 NOT ALL TREATMENTS ARE EQUALLY EFFECTIVE
 RATES LISTED ARE UNITS OF PRODUCT PER ACRE**

CROP CONDITION	DRY TEMPERATURES GREATER THAN 80° F (0-3 DAYS AFTER TREATMENT)	DRY TEMPERATURES LESS THAN 80° F (0-3 DAYS AFTER TREATMENT)	WET TEMPERATURES LESS THAN 75° F (0-3 DAYS AFTER TREATMENT)
HEIGHT: Short 12-14 inches YIELD: up to 500 lb/acre	Gramoxone Inteon 8-16 oz ¹	Gramoxone Inteon 8-16 oz ¹	Gramoxone Inteon 8-16 oz ¹
	Firestorm or Parazone 5.3-10.7 oz ¹	Firestorm or Parazone 5.3-10.7 oz ¹	Firestorm or Parazone 5.3-10.7 oz ¹
	Gramoxone Inteon 4-8 oz followed by (FB) Gramoxone Inteon up to 48 oz total ²	Gramoxone Inteon 8-12 oz FB Gramoxone Inteon up to 48 oz total ²	Gramoxone Inteon 8-12 oz FB Gramoxone Inteon up to 48 oz total ²
	Firestorm or Parazone 2.6-5.3 oz FB Firestorm up to 32 oz total ² or Parazone up to 32 oz total ³	Firestorm or Parazone 2.6-5.3 oz FB Firestorm up to 32 oz total ² or Parazone up to 32 oz total ³	Firestorm or Parazone 2.6-5.3 oz FB Firestorm up to 32 oz total ² or Parazone up to 32 oz total ³
	Gramoxone Inteon 6-10 oz + defoliant/desiccant ⁴	Gramoxone Inteon 8-12 oz + defoliant/desiccant ⁴	Gramoxone Inteon 10-24 oz + defoliant/desiccant ⁴
	Firestorm or Parazone 4-6.7 oz + defoliant/desiccant ⁴	Firestorm or Parazone 5.3-8 oz + defoliant/desiccant ⁴	Firestorm or Parazone 6.7-16 oz + defoliant/desiccant ⁴
	Ginstar 6-8 oz banded	Ginstar 8 oz banded	Ginstar 8-10 oz banded
	Aim EC 1 oz + COC with or without defoliant/desiccant	Aim EC 1 oz + COC with or without defoliant/desiccant	Aim EC 1 oz + COC with or without defoliant/desiccant
	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵
	ET 1.5-2 oz + COC with or without defoliant/desiccant	ET 1.5-2 oz + COC with or without defoliant/desiccant	ET 1.5-2 oz + COC with or without defoliant/desiccant
	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵
	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant
	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵
	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵

2011 HIGH PLAINS COTTON HARVEST-AID DECISION TABLE (continued)
NOT ALL TREATMENTS ARE EQUALLY EFFECTIVE
RATES LISTED ARE UNITS OF PRODUCT PER ACRE

CROP CONDITION	DRY TEMPERATURES GREATER THAN 80° F (0-3 DAYS AFTER TREATMENT)	DRY TEMPERATURES LESS THAN 80° F (0-3 DAYS AFTER TREATMENT)	WET TEMPERATURES LESS THAN 75° F (0-3 DAYS AFTER TREATMENT)
HEIGHT: Medium 15-24 inches YIELD: 500+ lb/acre	FOR TREATMENTS LISTED BELOW, A SEQUENTIAL APPLICATION OF PARAQUAT (OR OTHER DESICCANT ACTIVITY PRODUCT) 10-14 DAYS AFTER INITIAL TREATMENT WILL LIKELY BE NECESSARY TO SUFFICIENTLY CONDITION CROP		
	Gramoxone Inteon 6-10 oz ¹ + defoliant/desiccant ⁴	Gramoxone Inteon 8-12 oz ¹ + defoliant/desiccant ⁴	Gramoxone Inteon 10-24 oz ¹ + defoliant/desiccant ⁴
	Firestorm or Parazone 4-6.7 oz ¹ + defoliant/desiccant ⁴	Firestorm or Parazone 5.3-8 oz ¹ + defoliant/desiccant ⁴	Firestorm or Parazone 6.7-16 oz ¹ + defoliant/desiccant ⁴
	Gramoxone Inteon 4-8 oz followed by (FB) Gramoxone Inteon up to 48 oz total ²	Gramoxone Inteon 6-8 oz FB Gramoxone Inteon up to 48 oz total ²	—
	Firestorm or Parazone 2.6-5.3 oz FB Firestorm up to 32 oz total ² or Parazone up to 32 oz total ³	Firestorm or Parazone 4-5.3 oz FB Firestorm up to 32 oz total ² or Parazone up to 32 oz total ³	—
	Ginstar 6-8 oz	Ginstar 8 oz	Ginstar 8-10 oz
	Aim EC 1 oz + COC + defoliant/desiccant	Aim EC 1 oz + COC + defoliant/desiccant	Aim EC 1 oz + COC + defoliant/desiccant
	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵	Aim EC 1 oz + COC FB Aim EC 1 oz + COC ⁵
	ET 1.5-2 oz + COC with or without defoliant/desiccant	ET 1.5-2 oz + COC with or without defoliant/desiccant	ET 1.5-2 oz + COC with or without defoliant/desiccant
	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵	ET 1.5-2 oz + COC FB ET 1.5-2 oz + COC ⁵
	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant	Blizzard 0.5-0.6 oz + COC with or without defoliant/desiccant
	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵	Blizzard 0.5-0.6 oz + COC FB Blizzard 0.5-0.6 oz + COC ⁵
	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵	Resource 6-8 oz + COC FB Resource 4-6 oz + COC ⁵
	Prep 16 oz + Ginstar 3-5 oz	Prep 16-21 oz ⁶ + Ginstar 3-5 oz	Prep 21 oz ⁶ + Ginstar 3-5 oz
	Prep 16-21 oz + Folex 8-16 oz	Prep 16-21 oz ⁶ + Folex 16 oz	Prep 21 oz ⁶ + Folex 16 oz
	Prep 16-21 oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 16-21 oz ⁶ + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 21 oz ⁶ + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC
	Finish 6 Pro 21 oz + defoliant (Folex 8 oz or Ginstar 3-5 oz)	Finish 6 Pro 21-32 oz ⁶ (defoliant may be required)	Finish 6 Pro 21-42 oz ⁶ (defoliant may be required)
	FirstPick 3 pts + Ginstar 3 oz	FirstPick 3-4 pts ⁶ + Ginstar 5 oz	FirstPick 4 pts ⁶ + Ginstar 6-8 oz

2011 HIGH PLAINS COTTON HARVEST-AID DECISION TABLE (continued)
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RATES LISTED ARE UNITS OF PRODUCT PER ACRE

CROP CONDITION	DRY TEMPERATURES GREATER THAN 80° F (0-3 DAYS AFTER TREATMENT)	DRY TEMPERATURES LESS THAN 80° F (0-3 DAYS AFTER TREATMENT)	WET TEMPERATURES LESS THAN 75° F (0-3 DAYS AFTER TREATMENT)
HEIGHT: Greater than 24 inches YIELD: 1000+ lb/acre	FOR TREATMENTS LISTED BELOW, A SEQUENTIAL APPLICATION OF PARAQUAT (OR OTHER DESICCANT ACTIVITY PRODUCT) 10-14 DAYS AFTER INITIAL TREATMENT WILL LIKELY BE NECESSARY TO SUFFICIENTLY CONDITION CROP		
	Prep 21 oz + Folex 8-16 oz	Prep 21 oz + Folex 16 oz	Prep 21-28 oz ⁶ + Folex 16 oz
	Finish 6 Pro 21 oz + defoliant (Folex 8 oz or Ginstar 3-5 oz)	Finish 6 Pro 21-32 oz ⁶ + defoliant (Folex 8-10 oz or Ginstar 4-6 oz)	Finish 6 Pro 32-42 oz ⁶ + defoliant (Folex 8-10 oz or Ginstar 6-8 oz)
	Finish 6 Pro 21 oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Finish 6 Pro 21-32 ⁶ oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Finish 6 Pro 32-42 ⁶ oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC
	Prep 21 oz + Ginstar 3-5 oz	Prep 21-24 oz ⁶ + Ginstar 4-6 oz	Prep 24-32 ⁶ oz + Ginstar 6-8 oz
	Prep 21 oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 21-24 oz ⁶ + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 24-32 ⁶ oz + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC
	FirstPick 3-4pts + Ginstar 3-5 oz	FirstPick 4-5 pts ⁶ + Ginstar 6-8 oz	FirstPick 6-7pts ⁶ + Ginstar 6-8 oz
	FirstPick 3-4 pts + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	FirstPick 4-5 pts ⁶ + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	FirstPick 6-7 pts ⁶ + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC
	Ginstar 6-8 oz	Ginstar 8 oz	Ginstar 8-10 oz
LATE MATURING	CONDITIONING TREATMENT ONLY (Apply after daily heat units drop below 5, but 7 days before average first killing freeze date)		
	Gramoxone Inteon 4-8 oz	Gramoxone Inteon 6-12 oz	Gramoxone Inteon 10-16 oz
	Firestorm or Parazone 2.6-5.3 oz	Firestorm or Parazone 4-8 oz	Firestorm or Parazone 6.7-10.7 oz
	Prep 21-24 oz	Prep 21-32 oz ⁶	Prep 32-42 oz ⁶
	Prep 21-24 oz + Folex 8 oz or + Ginstar 8 oz or + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 21-32 oz ⁶ + Folex 8 oz or + Ginstar 8 oz or + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC	Prep 24-32 oz ⁶ + Folex 16 oz or + Ginstar 8-16 oz or + Aim EC 1 oz + COC or + Blizzard 0.5-0.6 oz + COC or + ET 1.5 oz + COC or + Resource 6-8 oz ⁵ + COC

FOOTNOTES

FB=Followed by

¹- Use on cotton with natural leaf shed. High rates can cause green, healthy leaves to stick. Always use a non-ionic surfactant when applying paraquat-based products (Gramoxone Inteon, Firestorm, Parazone). There is some concern for the single high dose rate on hairy-leaf cotton varieties. Poor leaf grades may be obtained. Make sure the cotton has 80% open bolls at application, use enough paraquat to completely kill all foliage, then stripper harvest only when leaves are dry enough to “crunch” when crushed by hand. Avoid stripper harvesting moist, dead leaves or high leaf grades may be encountered.

²-No more than 48 oz/acre total of Gramoxone Inteon or no more than 32 oz/acre total of Firestorm may be applied (in up to 3 multiple applications) in one season based on the Texas Special Local Need 24c label. The need for and rate of Gramoxone Inteon or Firestorm in a second application will depend upon green leaves remaining. Use higher rates if regrowth is excessive.

³-No more than 32oz/acre total of Parazone may be applied (in up to 3 multiple applications) in one season based on the current label. The need for and rate of Parazone in a second application will depend upon green leaves remaining. Use higher rates if regrowth is excessive.

⁴-Tankmix partners with Gramoxone Inteon, Firestorm, or Parazone can include sodium chlorate, Folex, Aim, Blizzard, ET, and Resource.

⁵-No more than: 3.2 oz/acre total of Aim 2EC, 1.25 oz/acre total of Blizzard, 5.5 oz/acre total (in no more than 2 applications) of ET, and 14 oz/acre (in no more than 2 applications with a maximum of 8 oz/acre per single application) of Resource may be applied during the growing season.

⁶-Ethephon-based product (such as Finish 6 Pro, FirstPick, Prep, Super Boll, Boll'd, Boll Buster, and Setup) activity is determined by rate and temperature. At lower temperatures, boll opening response can be enhanced by increasing rate.

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

Paraquat (Active Ingredient) Lb/Acre	GRAMOXONE INTEON (2 LB/GAL)		FIRESTORM and PARAZONE (3 LB/GAL)	
	Product Oz / Acre	Approximate Acres/Gal	Product Oz / Acre	Approximate Acres/Gal
0.0625	4	32	2.6	48
0.0938	6	21.3	4	32
0.1250	8	16	5.3	24
0.1563	10	12.8	6.7	19
0.1870	12	10.7	8	16
0.2500	16	8	10.7	12
0.3750	24	5.3	16	8
0.5000	32	4	21.3	6
0.7500	48	2.7	32	4

Brand Names and Similar Products

COMMONLY USED	SIMILAR PRODUCT
Prep (ethephon, 6 lb/gal)	Boll'd (Agrisolutions) Boll Buster (Loveland Products) Ethephon-6 (Arysta Lifescience) Flash (3 lb/gal, Helena) Setup 6SL (MANA) Super Boll (Nufarm)
Ginstar EC (thidiazuron + diuron)	Adios (Arysta Lifescience) Cutout (Nufarm) Redi-Pik 1.5EC (MANA)
Dropp SC (thidiazuron - not normally used in the High Plains due to low temperature sensitivity)	Daze 4SC (Agrisolutions) FreeFall SC (Nufarm) Klean-Pik (MANA) Take Down SC (Loveland Products)
Def (tribufos) - Discontinued by Bayer CropScience	Folex (Amvac)