

**Disclaimer:**

This document is based on the results from an individual trial and may contain experimental use patterns that are currently off-label. **This document does not provide any interpretation and should not be taken as an endorsement of any unregistered use pattern.**

Professional advice should be sought for specific recommendations to ensure access to the most up to date information and knowledge.

**Any product referred to in this document must be used strictly as directed, and in accordance with all label or permit instructions. Always consult the label prior to use.**

### Alternative Sorghum Herbicides 2014-15

Trial ID: RN1426      Location: Moree      Trial Year: 2014  
 Protocol ID: NGA1423      Investigator: Rachel Norton

|                     |                                |            |                                          |
|---------------------|--------------------------------|------------|------------------------------------------|
| Planting Date:      | 19/09/2014                     |            |                                          |
| Planting Equipment: | Commercial Single Disc Planter |            |                                          |
| Row Spacing:        | 150cm single skip              |            |                                          |
| Application Code:   | A                              | B          | C                                        |
| Application Date:   | 19/09/2014                     | 19/09/2014 | 13/10/2014                               |
| Target Stage:       | Pre-plant IBS                  | PSPE       | Post-em, 6 weeks after planting (6 leaf) |

| Scientific Pest Name:      |                |              |              |             |                    |              |                 | <i>Echinochloa colona</i> |                 |
|----------------------------|----------------|--------------|--------------|-------------|--------------------|--------------|-----------------|---------------------------|-----------------|
| Pest Name:                 |                |              |              |             |                    |              |                 | Awnless Barnyard grass    |                 |
| Crop Name:                 |                |              |              |             |                    |              | Grain sorghum   |                           |                 |
| Crop Variety:              |                |              |              |             |                    |              | MR Bazley       |                           |                 |
| Rating Date:               |                |              |              |             |                    |              | 07/10/2014      | 27/11/2014                | 19/01/2015      |
| Rating Type:               |                |              |              |             |                    |              | EMERGE          | COUNT                     | COUNT           |
| Rating Unit:               |                |              |              |             |                    |              | /m <sup>2</sup> | /m <sup>2</sup>           | /m <sup>2</sup> |
| Crop Stage Majority:       |                |              |              |             |                    |              | 13              | 45                        |                 |
| Pest Stage Majority:       |                |              |              |             |                    |              | 23              | 24                        |                 |
| Plant-Evaluation Interval: |                |              |              |             |                    |              | 18 DP1          | 69 DP1                    | 122 DP1         |
| ARM Action Codes:          |                |              |              |             |                    |              | T1              | AA T2                     | AL T3           |
| Trt No.                    | Treatment Name | Product Rate | Growth Stage | Appln. Code | Appln. Description | Spray Volume |                 |                           |                 |
| 1                          | Untreated      | -            | -            | -           | -                  | -            | 5.4             | 1.17a                     | 13.9-           |
| 2                          | Dual Gold      | 2000ml/ha    | PREPLA       | A           |                    | 70L/ha       | 5.2             | 0.00d                     | 1.6-            |
| 3                          | Dual Gold      | 1000ml/ha    | PREPLA       | A           |                    | 70L/ha       | 4.8             | 0.00cd                    | 2.1-            |
|                            | Gp K D         | 1000ml/ha    | POEMCR       | C           | 6 weeks            | 70L/ha       |                 |                           |                 |
| 4                          | Gp C D         | 1500g/ha     | PSPE         | B           |                    | 70L/ha       | 5.4             | 0.00d                     | 4.1-            |
| 5                          | Gp K O         | 1000ml/ha    | PREPLA       | A           |                    | 70L/ha       | 5.0             | 0.00d                     | 10.1-           |
| 6                          | Gp K O         | 1500ml/ha    | PREPLA       | A           |                    | 70L/ha       | 5.2             | 0.02bcd                   | 5.5-            |
| 7                          | Gp K O         | 1000ml/ha    | PREPLA       | A           |                    | 70L/ha       | 5.7             | 0.00d                     | 5.8-            |
|                            | Gp G S         | 115g/ha      | PREPLA       | A           |                    | 70L/ha       |                 |                           |                 |
| 8                          | Dual Gold      | 2000ml/ha    | PSPE         | B           |                    | 70L/ha       | 5.2             | 0.00d                     | 1.3-            |
| 9                          | Dual Gold      | 1000ml/ha    | PSPE         | B           |                    | 70L/ha       | 4.8             | 0.00cd                    | 1.1-            |
|                            | Gp K D         | 1000ml/ha    | POEMCR       | C           |                    | 70L/ha       |                 |                           |                 |
| 10                         | Dual Gold      | 1400ml/ha    | PSPE         | B           |                    | 70L/ha       | 4.9             | 0.05b                     | 2.4-            |
|                            | Terbyne Xtreme | 1000g/ha     | PSPE         | B           |                    | 70L/ha       |                 |                           |                 |
| 11                         | Dual Gold      | 1000ml/ha    | PSPE         | B           |                    | 70L/ha       | 5.6             | 0.01cd                    | 6.2-            |
|                            | Atrazine       | 1500g/ha     | PSPE         | B           |                    | 70L/ha       |                 |                           |                 |
| 12                         | Gp D SX        | 1650ml/ha    | POEMCR       | C           | 6 weeks            | 100L/ha      | 5.2             | 0.00cd                    | 2.5-            |
| 13                         | Gp D SX        | 3300ml/ha    | POEMCR       | C           | 6 weeks            | 100L/ha      | 5.7             | 0.04bc                    | 2.1-            |
| LSD P=.05                  |                |              |              |             |                    |              | nsd             | 0.83t                     | nsd             |
| Treatment Prob.(F)         |                |              |              |             |                    |              | 0.58            | 0.00                      | 0.10            |

Means followed by same letter do not significantly differ (P=.05, LSD)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P (F) is significant at mean comparison OSL.

nsd = No Significant Difference

Rating Type

EMERGE = emergence

COUNT = count

Rating Unit

/m2 = per square meter

Crop Stage Majority

13 = 3 leaves unfolded

45 = Flag leaf sheath swollen (late-boot)

Pest Stage Majority

23 = 3 side shoots visible; G\_3 tillers visible

24 = 4 side shoots visible; G\_4 tillers visible

Plant-Evaluation Interval

18 DP-1 = 1 SORVU 19/9/14

69 DP-1 = 1 SORVU 19/9/14

122 DP-1 = 1 SORVU 19/9/14

ARM Action Codes

AA = Automatic arcsine square root % transformation

AL = Automatic log transformation of X+1

T1 = [1]/4/1.5

T2 = Arcsine square root percent ([4])

T3 = LOG ([6] + 1)

| Application Description      |            |            |            |
|------------------------------|------------|------------|------------|
|                              | A          | B          | C          |
| Application Date:            | 19/09/2014 | 19/09/2014 | 13/10/2014 |
| Application Start Time:      | 9.10am     | 10.20am    | 9.30am     |
| Application Stop Time:       | 9:15am     | 11:00am    | 10:00 am   |
| Application Method:          | SPRAY      |            |            |
| Application Timing:          | PREPLA     | PSPE       | POEMW2     |
| Application Placement:       | SOIL       |            | FOLIAR     |
| Applied By:                  | RN         |            |            |
| Air Temperature, Unit:       | 14.8 C     | 16.9 C     | 22.4 C     |
| % Relative Humidity:         | 20         | 21         | 50         |
| Wind Velocity, Unit:         | 16 KPH     | 16 KPH     | 37 KPH     |
| Wind Direction:              | ENE        | ENE        | NNE        |
| Dew Presence (Y/N):          | N no       |            |            |
| Soil Moisture:               | DRY        | DRY        | WET        |
| % Cloud Cover:               | 0          | 0          | 25         |
| Next Moisture Occurred On:   |            |            | 13/10/2014 |
| Time to Next Moisture, Unit: |            |            | 2 HR       |

| Application Equipment     |          |   |   |
|---------------------------|----------|---|---|
|                           | A        | B | C |
| Application Equipment:    | Quadbike |   |   |
| Equipment Type:           | SPRAYE   |   |   |
| Operation Pressure, Unit: | 300 kPa  |   |   |
| Nozzle Type:              | AIXR     |   |   |
| Nozzle Size:              | 110015   |   |   |
| Nozzle Spacing, Unit:     | 50 cm    |   |   |
| Boom Length, Unit:        | 4 m      |   |   |
| Boom Height, Unit:        | 50 cm    |   |   |
| Ground Speed, Unit:       | 10.3 KPH |   |   |
| Spray Volume, Unit:       | 70 L/ha  |   |   |