SOYBEANS

TEST SERIES 1 – APSA-80® plus Assure on Soybeans
Summary of Results:
30% increase in yield
Over 100% increase in crowfoot grass control
85% increase in large crabgrass control

Test:
APSA-80 (5 oz./acre) was used with Assure (9 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Assure (9 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.4%
Soil pH: 5.9
Soil Moisture: Very Dry
Soybean Variety: Centennial
Row Spacing: 36"
Seeding Rate: 116,160/acre
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 30% increase (33.3 bu./acre vs. 25.6 bu./acre).
Weed Control: Increase in crowfoot grass control (93% vs. 29%) and an 85% increase in large crabgrass control (100% vs. 54%).

TEST SERIES 2 – APSA-80® plus Assure on Soybeans
Summary of Results:
10% increase in foxtail control
11% increase in yield

Test:
APSA-80 (5 oz./acre) was used with Assure (10.5 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against the use of Assure (10.5 oz./acre) alone.

Conditions:
Soil Type: Silty Clay Loam
Organic Matter: 4.5%
Soil pH: 5.6
Soil Moisture: Dry
Soybean Variety: Century
Row Spacing: 30"
Seeding Rate: 130,000/acre
Spray Volume: 20 gal./acre
Nozzle: LF-3
Band Width: Broadcast

Result:
Yield: 11% increase (42.6 bu./acre vs. 38.3 bu./acre).
Weed Control: 10% increase in foxtail control (85% vs. 77%).

TEST SERIES 3 – APSA-80® plus Blazer on Soybeans
Summary of Results:
18% increase in crop yield
87% increase in pigweed control
58% increase in common cocklebur control
over 100% increase in common lambsquarters and carpetweed control

Test:
In a two-year field trial, APSA-80 (5 oz./acre) plus Blazer (1 pt./acre) was applied in a post-emergent application to soybeans and compared for weed control and crop yield against the use of Blazer (1 pt./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.2%
Soil pH: 5.8
Soil Moisture: Dry
Soybean Variety: Centennial
Row Spacing: 36"
Spray volume: 20 gal./acre
Nozzle: Teejet 8002

Result:
Yield: 18% increase (31.1 bu./acre vs. 26.2 bu./acre).
Weed Control: 87% increase in pigweed control (96.2% vs. 51.2%), a 58% increase in common cocklebur control (85.8% vs. 54.2%), and substantial increases in both common lambsquarters control (95% vs. 5%) and carpetweed control (81% vs. 29%) over the use of Blazer alone.

TEST SERIES 4 – APSA-80® plus Classic on Soybeans
Summary of Results:
Substantial increase in sicklepod control
Substantial increase in entireleaf morningglory control

Test:
APSA-80 (5 oz./acre) plus Classic (0.25 oz./acre) was applied in an early post-emergent application to soybeans and compared for weed control against the use of Classic (0.25 oz./acre) alone.

Result:
Weed Control: Substantial increases in sicklepod control (80% vs. 23.3%) and entireleaf morningglory control (96.7% vs. 53.3%).

TEST SERIES 5 – APSA-80® plus Classic on Soybeans
Summary of Results: 15% increase in yield

46% increase in pigweed control
10% increase in common cocklebur control
Over 100% increase in ivyleaf morningglory control

Test:
APSA-80 (5 oz./acre) plus Classic (1/8 oz./acre) was applied in a post-emergent application to soybeans and compared for weed control and crop yield against the use of Classic (1/8 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.2%
Soil pH: 5.8
Soil Moisture: Dry
Soybean Variety: Centennial
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002

Result:
Yield: 15% increase in crop yield (37.7 bu./acre vs. 32.7 bu./acre).
Weed Control: 46% increase in pigweed control (97.7% vs. 66.6%), a 10% increase in common cocklebur control (98.3% vs. 89.2%), and a substantial increase in ivyleaf morningglory control (85.8% vs. 35%) over the use of Classic alone.

TEST SERIES 6 – APSA-80® plus Classic on Soybeans
Summary of Results:
20% increase in yield
34% increase in sicklepod control
46% increase in tall morningglory control

Test:
APSA-80 (5 oz./acre) was used with Classic (0.5 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Classic (0.5 oz.) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.2%
Soil pH: 6.0
Soil Moisture: Wet
Soybean Variety: Holladay
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 8002R
Band Width: Broadcast

Result:
Yield: 20% increase (32.7 bu./acre vs. 27.3 bu./acre).
Weed Control: 34% increase in sicklepod control (90% vs. 67%) and a 46% increase in tall morningglory control (87% vs. 57%).

TEST SERIES 7 – APSA-80® plus Classic + Pinnacle on Soybeans
Summary of Results:
33% increase in yield
30% increase in smooth pigweed control
43% increase in common cocklebur control

Test:
APSA-80 (5 oz./acre) was used with Classic (0.25 oz./acre) + Pinnacle (0.25 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Classic (0.25 oz./acre) + Pinnacle (0.25 oz./acre) alone.

Result:
Yield: 33% increase (36 bu./acre vs. 27 bu./acre).
Weed Control: 30% increase in smooth pigweed control (100% vs. 77%) and a 43% increase in common cocklebur control (100% vs. 70%).

TEST SERIES 8 – APSA-80® plus Cobra on Soybeans
Summary of Results:
12% increase in yield
82% increase in carpetweed control
58% increase in redroot pigweed control

Test:
APSA-80 (5 oz./acre) was used with Cobra (9.6 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Cobra (9.6 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.4%
Soil pH: 5.9
Soil Moisture: Dry
Soybean Variety: Centennial
Row Spacing: 36"
Seeding Rate: 116,160/acre
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 12% increase (26.9 bu./acre vs. 23.8 bu./acre).
Weed Control: 82% increase in carpetweed control (98% vs. 54%) and 58% increase in redroot pigweed control (98% vs. 62%).

TEST SERIES 9 – APSA-80® plus Fusilade DX on Soybeans
Summary of Results:
13% increase in yield

12% increase in fall panicum control
11% increase in large crabgrass control

Test:
APSA-80 (5 oz./acre) was used with Fusilade DX (12 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Fusilade DX (12 oz./acre) alone.

Result:
Yield: 13% increase (34 bu./acre vs. 30 bu./acre).
Weed Control: 12% increase in fall panicum control (90% vs. 80%) and an 11% increase in large crabgrass control (92% vs. 83%).

TEST SERIES 10 – APSA-80® plus Paraquat on No-Till Soybeans
Summary of Results:
25% increase in yield
56% increase in common lambsquarters control
27% increase in sicklepod control
26% increase in ivyleaf morningglory control

Test:
APSA-80 (5 oz./acre) was used with a Paraquat/Sencor treatment (0.25/0.38 lb. active ingredient/acre) in a no-till application on soybeans after wheat and compared for yield and weed control against the use of Paraquat/Sencor (0.25/0.38 lb. active ingredient/acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 0.9%
Soil pH: 6.0
Soil Moisture: Dry
Soybean Variety: Ransom
Row Spacing: 20"
Seeding rate: 156,500/acre
Spray Volume: 20 gal.
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 25% increase (26.1 bu./acre vs. 20.8 bu./acre).
Weed Control: 56% increase in common lambsquarters control (78% vs. 50%), a 27% increase in sicklepod control (85% vs. 67%), and a 26% increase in ivyleaf morningglory control (90% vs. 70%).

TEST SERIES 11 – APSA-80® plus Pinnacle on Soybeans
Summary of Results:
9.5% increase in soybean yield
18% increase in common lambsquarters control

Test:
APSA-80 (2.5 oz./20 gal./acre) was used with Pinnacle (0.25 oz./acre) + 28-0-0 (2 qt./acre) in a

post-emergent application on soybeans and compared for weed control against the use of Pinnacle (0.25 oz./acre) + 28-0-0 (2 qt./acre) alone.

Result:
Yield: 9.5% increase (37.9 bu./acre vs. 34.6 bu./acre) based on less weed competition over the use of Pinnacle alone.
Weed Control: 18% increase in common lambsquarters control (98% vs. 83%) measured 4 weeks after application when compared to Pinnacle + 28-0-0 alone.

Conditions:
Soil Type: Silty Clay Loam
Organic Matter: 5.2%
Soil pH: 6.5
Soil Moisture: Moist
Soybean Variety: Kruger 2515
Row Spacing: 30"
Seeding Rate: 150,000/acre
Nozzle: Flat Fan 8004
Band Width: Broadcast

TEST SERIES 12 – APSA-80® plus Pinnacle and Classic on Soybeans
Summary of Results:
50% increase in redroot pigweed control
Substantial increase in entireleaf morningglory control

Test:
APSA-80 (5 oz./acre) plus Pinnacle (0.25 oz./acre) and Classic (0.25 oz./acre) was applied in an early post-emergent application to soybeans and compared against the use of Pinnacle (0.25 oz./acre) and Classic (0.25 oz./acre) alone.

Result:
Weed Control: 50% increase in redroot pigweed control (100% vs. 66.7%) and a substantial increase in entireleaf morningglory control (93.3% vs. 33.3%).

TEST SERIES 13 – APSA-80® plus Pinnacle on Soybeans
Summary of Results:
50% increase in redroot pigweed control

Test:
APSA-80 (5 oz./acre) plus Pinnacle (0.25 oz./acre) was applied in an early post-emergent application to soybeans and compared for weed control against the use of Pinnacle (0.25 oz./acre) alone.

Result:
Weed Control: 50% increase in redroot pigweed control (100% vs. 66.7%).

TEST SERIES 14 – APSA-80® plus Pinnacle on Soybeans
Summary of Results:

16% increase in yield
11% increase in smooth pigweed control
18% increase in common cocklebur control

Test:
APSA-80 (5 oz./acre) was used with Pinnacle (0.5 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Pinnacle (0.5 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.8%
Soil pH: 5.4
Soil Moisture: Optimal
Soybean Variety: Centennial
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 16% increase (29 bu./acre vs. 25 bu./acre).
Weed Control: 11% increase in smooth pigweed control (97% vs. 87%) and an 18% increase in common cocklebur control (98% vs. 83%).

TEST SERIES 15 – APSA-80® plus Pursuit on Soybeans
Summary of Results:
14% increase in crop yield
24.1% increase in total weed control
27% increase in common lambsquarters control
55% increase in common ragweed control
20% increase in velvetleaf control
14% increase in green foxtail control
11% increase in yellow foxtail control
10% increase in green pigweed control
4% increase in redroot pigweed control

Test:
In an eight-location test, APSA-80 (0.25%/4.5 oz./acre) was used with Pursuit (30 gm active ingredient/acre) + 28-0-0 (1.5 gal./100 gal. spray volume) in a post-emergent application on soybeans and compared for weed control against the use of Pursuit (30 gm active ingredient/acre) + 28-0-0 (1.5 gal./100 gal. spray volume) alone.

Result:
Yield: 14% increase in soybean yield (33.5 bu./acre vs. 29.4 bu./acre).
Weed Control: 24.1% increase in total weed control (95.2% vs. 76.7%), 27% increase in common lambsquarters control (85.4% vs. 67%), 55% increase in common ragweed control (90% vs. 58%), 20% increase in velvetleaf control (93% vs. 77.5%), 14% increase in green foxtail control (98% vs. 86%), 11% increase in yellow foxtail control (99% vs. 89%), 10% increase in green pigweed control (99% vs. 90%), and 4% increase in redroot pigweed control (100% vs. 95.7%) measured 24 days after treatment.

Conditions:
Soil Types: Clay Loam, Loam, Loamy Sand, Sandy Loam, Silt Loam
Organic Matter: 1.5–2.1%
Soil pH: 5.6–7.3
Soybean Variety: Six Varieties
Spray Volume: 14 gal./acre
Nozzle: 11001.5

TEST SERIES 16 – APSA-80® plus Pursuit on Soybeans
Summary of Results:
9% increase in giant foxtail control
12% increase in common lambsquarters control

Test:
APSA-80 (5 oz./20 gal./acre) was used with Pursuit (4 oz./acre) + 28-0-0 (1 qt./acre) in a post-emergent application on soybeans and compared for weed control against the use of Pursuit (4 oz./acre) + 28-0-0 (1 qt./acre) alone.

Result:
Weed Control: 9% increase in giant foxtail control (97% vs. 89%) and a 12% increase in common lambsquarters control (92% vs. 82%) measured 4 weeks after application when compared to Pursuit + 28-0-0 alone.

Conditions:
Soil Type: Silty Clay Loam
Organic Matter: 5.2%
Soil pH: 6.5
Soil Moisture: Moist
Soybean Variety: Kruger 2515
Row Spacing: 30"
Seeding Rate: 150,000/acre
Nozzle: Flat Fan 8004
Band Width: Broadcast

TEST SERIES 17 – APSA-80® plus Pursuit on Soybeans
Summary of Results:
67% increase in weed control

Test: In a three-location test APSA-80 (0.25%) was used with Pursuit + 28-0-0 (3 oz./acre + 1.5 gal./acre) in a post-emergent application on corn and compared against Pursuit + 28-0-0 (3 oz./acre + 1.5 gal./acre) alone.

Result:
Weed Control: 67% increase in average weed control (86.1% vs. 51.5%). Weed species included giant foxtail, yellow foxtail, smooth pigweed, velvetleaf, common lambsquarters, and barnyardgrass.

TEST SERIES 18 – APSA-80® plus Pursuit on Soybeans
Summary of Results:
26% increase in yield
9% increase in smooth pigweed control

Test:
APSA-80 (5 oz./acre) was used with Pursuit (4 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Pursuit (4 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.8%
Soil pH: 5.4
Soil Moisture: Optimal
Soybean Variety: Centennial
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 26% increase (34 bu./acre vs. 27 bu./acre).
Weed Control: 9% increase in smooth pigweed control (100% vs. 92%).

TEST SERIES 19 – APSA-80® plus Pursuit on Soybeans
Summary of Results:
23% increase in redroot pigweed control
Substantial increase in entireleaf morningglory control

Test:
APSA-80 (5 oz./acre) plus Pursuit (4 oz./acre) was applied in an early post-emergent application to soybeans and compared for weed control against the use of Pursuit (4 oz./acre) alone.

Result:
Weed Control: 23% increase in redroot pigweed control (98.4% vs. 80%) and a substantial increase in entireleaf morningglory control (83.4% vs. 31.6%).

TEST SERIES 20 – APSA-80® plus Reflex on Soybeans
Summary of Results:
19% increase in crop yield
30% increase in common cocklebur control
22% increase in pigweed control
Over 100% increase in carpetweed control

Test:
In a two-year field trial, APSA-80 (5 oz./acre) plus Reflex (1 pt./acre) was applied in a post-emergent application to soybeans and compared for weed control and crop yield against the use of Reflex (1 pt./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.2%
Soil pH: 5.8
Soil Moisture: Dry
Soybean Variety: Centennial
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002

Result:
Yield: 19% increase (32.1 bu./acre vs. 26.8 bu./acre).
Weed Control: 30% increase in common cocklebur control (94.7% vs. 72.5%), a 22% increase in pigweed control (96.8% vs. 79.2%), and a substantial increase in carpetweed control (94% vs. 20%).

TEST SERIES 21 – APSA-80® plus Roundup on No-Till Soybeans
Summary of Results:
21% increase in yield
30% increase in ivyleaf morningglory control
24% increase in common lambsquarter control
24% increase in sicklepod control

Test:
APSA-80 (5 oz./acre) was used with Roundup/Sencor no-till treatment preplant (24 oz./12 oz./acre) on soybeans after wheat and compared for yield and weed control against the Roundup-Sencor treatment (24 oz./12 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 0.9%
Soil pH: 6.0
Soil Moisture: Dry
Soybean Variety: Ransom
Row Spacing: 20"
Seeding Rate: 156,500/acre
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 21% increase (27.8 bu./acre vs. 22.9 bu./acre).
Weed Control: 30% increase in ivyleaf morningglory control (88% vs. 68%), a 24% increase in common lambsquarter control (85% vs. 69%), and a 24% increase in sicklepod control (89% vs. 72%).

TEST SERIES 22 – APSA-80® plus Scepter on Soybeans
Summary of Results:
28% increase in redroot pigweed control

Test:
APSA-80 (5 oz./acre) plus Scepter (4 oz./acre) was applied in an early post-emergent application to soybeans and compared for weed control against the use of Scepter (4 oz./acre) alone.

Result:
Weed Control: 28% increase in redroot pigweed control (98.4% vs. 76.6%).

TEST SERIES 23 – APSA-80® plus Scepter on Soybeans
Summary of Results:
20% increase in yield
Over 100% increase in entireleaf morningglory control

Test:
APSA-80 (5 oz./20 gal./acre) was used with Scepter (2/3 pt./acre) in a post-emergent application on soybeans and compared for yield and weed control against Scepter (2/3 pt./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.8%
Soil pH: 5.4
Soil Moisture: Optimal
Soybean Variety: Centennial
Spray Volume: 20 gal./acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:
Yield: 20% increase (30 bu./acre vs. 25 bu./acre).
Weed Control: Over 100% increase in entireleaf morningglory control (83% vs. 33%).

TEST SERIES 24 – APSA-80® plus Select on Soybeans
Summary of Results:
27% increase in yield
13% increase in fall panicum control
16% increase in large crabgrass control
10% increase in goosegrass control

Test:
APSA-80 (5 oz./acre) was used with Select (12 oz./acre) in a post-emergent application on soybeans and compared for yield and weed control against Select (12 oz./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.2%
Soil pH: 6.0
Soil Moisture: Wet
Soybean Variety: Holladay
Row Spacing: 36"

Spray Volume: 20 gal./acre
Nozzle: Flat Fan 8002R
Band Width: Broadcast

Result:
Yield: 27% increase (34.7 bu./acre vs. 27.3 bu./acre).
Weed Control: 13% increase in fall panicum control (85% vs. 75%), a 16% increase in large crabgrass control (85% vs. 73%), and a 10% increase in goosegrass control (85% vs. 77%).

TEST SERIES 25 – APSA-80® plus Storm on Soybeans
Summary of Results:
20% increase in yield
9% increase in smooth pigweed control
19% increase in entireleaf morningglory control
4% increase in common cocklebur control

Test:
APSA-80 (5 oz./acre) was used with Storm (1.5 pt./acre) in a post-emergent application on soybeans and compared for yield and weed control against Storm (1.5 pt./acre) alone.

Conditions:
Soil Type: Sandy Loam
Organic Matter: 1.8%
Soil pH: 5.4
Soil Moisture: Wet
Soybean Variety: Centennial
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 8002
Band Width: Broadcast

Result:
Yield: 20% increase (30 bu./acre vs. 25 bu./acre).
Weed Control: 9% increase in smooth pigweed control (100% vs. 92%), a 19% increase in entireleaf morningglory control (92% vs. 77%), and a 4% increase in common cocklebur control (100% vs. 97%).