

CORN

TEST SERIES 1 – APSA-80® plus Aatrex on Corn

Summary of Results:

14% increase in yield
52% increase in large crabgrass control
48% increase in common lambsquarter control
39% increase in tall morningglory control

Test:

APSA-80 (5 oz./20 gal./acre) was used with Aatrex 90D (1 lb. active ingredient/acre) in a post-emergent application on corn and compared for yield and weed control against Aatrex 90D (1 lb. active ingredient/acre) alone.

Conditions:

Soil Type: Sandy Loam
Organic Matter: 1.1%
Soil pH: 6.0
Soil Moisture: Dry
Corn Variety: Pioneer 3184
Row Spacing: 36"
Seeding Rate: 22,000/acre
Nozzle: Teejet 8002
Band Width: Broadcast

Result:

Yield: 14% increase (126.7 bu./acre vs. 111.0 bu./acre).
Weed control: 52% increase in large crabgrass control (86% vs. 57%), a 48% increase in common lambsquarter control (91% vs. 62%) and a 39% increase in tall morningglory control (91% vs. 66%).

TEST SERIES 2 – APSA-80® plus Accent on Corn

Summary of Results:

22% increase in giant foxtail control
11% increase in smooth pigweed control
37% increase in velvetleaf control
9% increase in Pennsylvania smartweed control
20% increase in common cocklebur control

Test:

APSA-80 (5 oz./20 gal./acre) was used with Accent (5 oz./acre) + 28-0-0 (2 qt./acre) in a post-emergent application on corn and compared for weed control against the use of Accent (5 oz./acre) + 28-0-0 (2 qt./acre) alone.

Result:

Weed Control: 22% increase in giant foxtail control (94% vs. 77%), 11% increase in smooth pigweed control (97% vs. 87%), 37% increase in velvetleaf control (92% vs. 67%), 9% increase in Pennsylvania smartweed control (100% vs. 92%), and a 20% increase in common cocklebur control (100% vs. 83%), measured 4 weeks after application when compared to Accent + 28-0-0 alone.

Conditions:

Soil Type: Loam
Organic Matter: 7.0%
Soil pH: 7.3
Soil Moisture: Moist
Soybean Variety: CFS 6326
Row Spacing: 30"
Seeding Rate: 28,000/acre
Nozzle: Flat Fan 8004
Band Width: Broadcast

TEST SERIES 3 – APSA-80® Plus Accent on Corn

Summary of Results:

31% increase in weed control

9.1% increase in corn yield

Test: APSA-80 (5 oz./acre) was used with Accent (0.45 oz./acre) in a post-emergent application on corn and compared against Accent (0.45 oz./acre) alone.

Result:

Yield 9.1% increase increase in corn yield (155.1 bu./acre vs. 142.1 bu./acre).

Weed Control: 31% increase in average weed control (91.7% vs. 69.7%). Weed species included giant foxtail, smooth pigweed, velvetleaf, Pennsylvania smartweed, common lambsquarters, black nightshade, common cocklebur and giant ragweed.

Conditions:

Soil Types: Silty Clay Loam
Organic Matter: 4.4%
Soil pH: 6.5
Soybean Variety: EX 3608
Spray Volume: 25 gallons/acre
Nozzle: 8004

TEST SERIES 4 – APSA-80® plus Accent on Corn

Summary of Results:

2% increase in yield

34% increase in johnsongrass control at 14 days

5% increase in johnsongrass control at 55 days

Test:

APSA-80 (5 oz./acre) was used with Accent (2/3 oz./acre) in a post-emergent application on corn and compared for yield and weed control against Accent (2/3 oz./acre) alone.

Conditions:

Soil Type: Loam
Organic Matter: 2.2%
Soil pH: 5.3
Soil Moisture: Dry
Corn Variety: DeKalb 789

Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 11002

Result:

Yield: 2% increase (123.2 bu./acre vs. 120.8 bu./acre).

Weed Control: 34% increase in johnsongrass control 14 days after treatment (92% vs. 68%) and a 5% increase in johnsongrass control 55 days after treatment (99% vs. 94%).

TEST SERIES 5 – APSA-80® plus Accent on Corn

Summary of Results:

18% increase in yield

49% increase in large crabgrass control

53% increase in goosegrass control

Test:

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

Conditions:

Soil Type: Sandy Loam

Organic Matter: 1.8%

Soil pH: 6.0

Soil Moisture: Moist

Corn Variety: Pioneer 3245

Row Spacing: 36"

Spray Volume: 20 gal./acre

Nozzle: Flat Fan 8002R

Band Width: Broadcast

Result:

Yield: 18% increase (97.7 bu./acre vs. 83.0 bu./acre).

Weed Control: 49% increase in large crabgrass control (85% vs. 57%) and a 53% increase in goosegrass control (87% vs. 57%).

TEST SERIES 6 – APSA-80® plus Accent + Aatrex 4L on Corn

Summary of Results:

7% increase in yield

29% increase in johnsongrass control at 14 days

Test:

APSA-80 (5 oz./acre) was used with Accent (2/3 oz./acre) + Aatrex 4L (1 qt./acre) in a post-emergent application on corn and compared for yield and weed control against Accent (2/3 oz./acre) + Aatrex 4L (1 qt./acre) alone.

Conditions:

Soil Type: Loam

Organic Matter: 2.2%
Soil pH: 5.3
Soil Moisture: Dry
Corn Variety: Dry
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 11002

Result:

Yield: 7% increase in yield (134.8 bu./acre vs. 126.3/acre).

Weed Control: 29% increase in johnsongrass control 14 days after treatment (82% vs. 63%).

TEST SERIES 7 – APSA-80® plus Atrazine on Corn

Summary of Results:

15% increase in yield

12% increase in total broadleaf weed control

64% increase in total grass control

Test:

APSA-80 (5 oz./acre) was used with Atrazine (2 lb. active ingredient/acre) in a post-emergent application on non-irrigated corn and compared for yield and weed control against the use of Atrazine (2 lb. active ingredient/acre) alone. The results are averages of a two-year, two-location study.

Result:

Yield: 15% increase (112 bu./acre) vs. 97 bu./acre) based on less weed competition over use of Atrazine alone.

Weed Control: 12% increase in total broadleaf weed control (91% vs. 81% control) and a 64% increase in grass control (57% vs. 34% control) over the use of Atrazine alone. Broadleaf weeds included lambsquarter, pigweed, velvetleaf, smartweed, and morningglory. Grasses included giant foxtail and fall panicum.

TEST SERIES 8 – APSA-80® plus Beacon on Corn

Summary of Results:

6.9% increase in weed control

16% increase in corn yield

Test: APSA-80 (5 oz./acre) was used with Beacon (0.51 oz./acre) in a post-emergent application on corn and compared against Beacon (0.51 oz./acre) alone.

Result:

Yield: 16% increase in corn yield (161.8 bu./acre vs. 139.0 bu./acre).

Weed Control: 16% increase in average weed control (96.0% vs. 89.8%). Weed species included giant foxtail, smooth pigweed, velvetleaf, Pennsylvania smartweed, common lambsquarters, black nightshade, common cocklebur and giant ragweed.

Conditions:

Soil Types: Silty Clay Loam

Organic Matter: 4.4%
Soil pH: 6.5
Soybean Variety: EX 3608
Spray Volume: 25 gal./acre
Nozzle: 8004

TEST SERIES 9 – APSA-80® plus Beacon on Corn

Summary of Results:

10% increase in yield
32% increase in johnsongrass control at 14 days

Test:

APSA-80 (5 oz./acre) was used with Beacon (3/4 oz./acre) in a post-emergent application on corn and compared for yield and weed control against Beacon (3/4 oz./acre) alone.

Conditions:

Soil Type: Loam
Organic Matter: 2.2%
Soil PH: 5.3
Soil Moisture: Dry
Corn Variety: DeKalb 789
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 11002

Result:

Yield: 10% increase (110.3 bu./acre vs. 100.5 bu./acre)
Weed Control: 32% increase in johnsongrass control 14 days after treatment (88% vs. 67%).

TEST SERIES 10 – APSA-80® plus Beacon + Aatrex 4L on Corn

Summary of Results:

9% increase in yield
30% increase in johnsongrass control at 14 days

Test:

APSA-80 (5 oz./acre) was used with Beacon (3/4 oz./acre) + Aatrex 4L (1 qt./acre) in a post-emergent application on corn and compared for yield and weed control against Beacon (3/4 oz./acre) + Aatrex 4L (1 qt./acre) alone.

Conditions:

Soil Type: Loam
Organic Matter: 2.2%
Soil pH: 5.3
Soil Moisture: Dry
Corn Variety: DeKalb 789
Row Spacing: 36"
Spray Volume: 20 gal./acre
Nozzle: Flat Fan 11002

Result:

Yield: 9% increase in crop yield (114.8 bu./acre vs. 105.5 bu./acre).

Weed Control: 30% increase in johnsongrass control 14 days after treatment (82% vs. 63%).

TEST SERIES 11 – APSA-80® plus Beacon + 2, 4-D on Corn

Summary of Results:

2% increase in yield

53% increase in johnsongrass control at 14 days

Test:

APSA-80 (5 oz./acre) was used with Beacon (3/4 oz./acre) + 2, 4-D (1 pt./acre) in a post-emergent application on corn and compared for yield and weed control against Beacon (3/4 oz./acre) + 2, 4-D (1 pt./acre) alone.

Conditions:

Soil Type: Loam

Organic Matter: 2.2%

Soil pH: 5.3

Soil Moisture: Dry

Corn Variety: DeKalb 789

Row Spacing: 36"

Spray Volume: 20 gal./acre

Nozzle: Flat Fan 11002

Result:

Yield: 2% increase (112.2 bu./acre vs. 109.8 bu./acre).

Weed Control: 53% increase in johnsongrass control 14 days after treatment (77% vs. 50%).

TEST SERIES 12 – APSA-80® plus 2, 4-D Amine on Corn

Summary of Results:

23% increase in crop yield

57% increase in common lambsquarters control

34% increase in common ragweed control

32% increase in ivyleaf morningglory control

Test:

APSA-80 (5 oz./acre) plus 2, 4-D Amine (0.5 lb. active ingredient/acre) was applied in a post-emergent application to corn and compared for weed control and crop yield against the use of 2, 4-D Amine (0.5 lb. active ingredient/acre) alone.

Conditions:

Soil Type: Sandy Loam

Organic Matter: 1.0%

Soil pH: 5.8

Soil Moisture: Optimal

Corn Variety: Pioneer 3184

Row Width: 36"

Spray Volume: 20 gal./acre

Result:

Yield: 23% increase (97.7 bu./acre vs. 79 bu./acre).

Weed Control: 57% increase in common lambsquarters control (91.7% vs. 58.3%), a 34% increase in common ragweed control (96.7 vs. 71.7%), and a 32% increase in ivyleaf morningglory control (95.0% vs. 71.7%).

TEST SERIES 13 – APSA-80® plus Evik on Corn

Summary of Results:

14% increase in yield

36% increase in crabgrass control

14% increase in prickly sida control

14% increase in morningglory control

Test:

APSA-80 (5 oz./acre) was applied with Evik (1 lb. active ingredient/acre) in a post-emergent application on corn and compared against Evik (1 lb. active ingredient/acre) alone.

Result:

Yield: 14% (103 bu./acre vs. 90 bu./acre) based on less weed competition over use of Evik alone.

Weed Control: 36% increase in crabgrass control (100% vs. 73%), a 14% increase in prickly sida control (100% vs. 87%), and a 14% increase in morningglory control (100% vs. 87%) over the use of Evik alone.

TEST SERIES 14 – APSA-80® plus Exceed on Corn

Summary of Results:

13.4% increase in weed control

Test: APSA-80 (5 oz./acre) was used with Exceed (1 oz./acre) on corn and compared for weed control against Exceed (1 oz./acre) alone:

Result:

Weed Control: 13.4% increase in weed control measured 21 days after treatment. Weed species included sicklepod, smooth pigweed, and entireleaf morningglory.

Conditions:

Soil Types: Sandy Loam

Organic Matter: 1.0%

Soil pH: 5.8

Soybean Variety: Pioneer 3163

Seeding Rate: 22,000/acre

Soil Moisture: Dry

Spray Volume: 20 gal./acre

Nozzle: 8002

TEST SERIES 15 – APSA-80® plus Parathion and EPN on Corn

Summary of Results:

9.6% increase in western bean cutworm control

Test:

APSA-80 (0.25 fl. oz./2 gal./acre) was used with a Parathion (0.25 lb. active ingredient/acre) and EPN (0.25 lb. active ingredient/acre) tank mix in an aerial post-emergent application on corn and evaluated for western bean cutworm control against the use of Parathion (0.25 lb. active ingredient/acre) and EPN (0.25 lb. active ingredient/acre) alone.

Conditions:

Soil Type: Sandy Loam

Organic Matter: 1.1%

Soil pH: 6.7

Corn Variety: Pioneer 3475

Seeding Rate: 28,500/acre

Spray Volume: 2 gal./acre

Nozzle: D 8-45

Band Width: Aerial 45 feet

Result:

Pest Control: 9.6% increase in western bean cutworm control (93.4% vs. 85.2%).

TEST SERIES 16 – APSA-80® plus Permit on Corn

Summary of Results:

10.4% increase in weed control

Test: APSA-80 (5 oz./acre) was used with Permit (1 1/3 oz./acre) on corn and compared for weed control against Permit (1 1/3 oz./acre) alone:

Result:

Weed Control: 10.4% increase in weed control measured 21 days after treatment. Weed species included sicklepod, smooth pigweed, and entireleaf morningglory.

Conditions:

Soil Types: Sandy Loam

Organic Matter: 1.0%

Soil pH: 5.8

Soybean Variety: Pioneer 3163

Seeding Rate: 22,000/acre

Soil Moisture: Dry

Spray Volume: 20 gal./acre

Nozzle: 8002