

**DUPONT LAYBY PRO HERBICIDE****Jeff H. Meredith and Eric P. Castner****DuPont Crop Protection****Memphis, TN****Abstract**

DuPont™ Layby™ Pro is a new contact and residual herbicide for post-directed application in cotton. Layby™ Pro is a premix of linuron and diuron at an optimal ratio for cotton layby application. Layby Pro was registered by the US EPA in March 2004 for use on cotton east of the Rocky Mountains. Layby™ Pro exhibits broad-spectrum weed control as well as fast burndown activity. Layby™ Pro controls the major broadleaf weeds in cotton including pigweed, morningglory, sesbania, sicklepod, smartweed, prickly sida, cocklebur, dayflower, purslane, velvetleaf, lambsquarters, FL beggarweed, FL pusley, and 9 other species. Layby™ Pro also controls key grass weeds including, barnyardgrass, broadleaf signalgrass, crabgrass, fall panicum, foxtails, goosegrass, TX panicum, annual ryegrass, rattail fescue, and canarygrass. Layby™ Pro is compatible with conventional, Roundup Ready, BXN, and Liberty Link cotton production systems.

In 2004, DuPont Layby™ Pro was tested extensively at universities across the cotton belt. The following table indicates the high level of weed control of Layby™ Pro versus other commonly used herbicide programs.

<b>Herbicide Program</b>	<b>Barnyardgrass Control</b>	<b>Goosegrass Control</b>	<b>P. Amaranth Control</b>	<b>Pitted MG Control</b>	<b>Prickly Sida Control</b>
Layby™ Pro + MSMA	93%	98%	96%	93%	91%
Roundup Weathermax + Direx	90%	99%	95%	86%	91%
Suprend	70%	98%	83%	83%	86%
Roundup Weathermax	87%	99%	89%	79%	90%

Another objective of the 2004 development program was to determine the effect of common adjuvants and tank mixes. The following table indicates the overall weed control of DuPont™ Layby™ Pro by itself and in combinations with crop oil, nonionic surfactant, and MSMA.

<b>Tank Mix</b>	<b>Percent Control – all weed species across all locations</b>
Layby Pro alone	91.0%
Layby Pro with crop oil	93.6%
Layby Pro with non-ionic surfactant	94.2%
Layby Pro with MSMA and crop oil	96.4%
Layby Pro with MSMA and non-ionic surfactant	96.4%

A tank mix of DuPont™ Layby™ Pro and MSMA with crop oil or nonionic surfactant provided best overall weed control. The addition of MSMA aided in control of grasses and morningglory.