

The Value of Herbicides to U.S. Farmers

	\$ Billion
Crop Losses Eliminated	+ 13.3
Weed Control Costs Reduced	- 7.7
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Total Benefits from Herbicides	+ \$ 21.0 billion

- United States growers spend \$6.6 billion for herbicides and their application annually.
- Herbicides make it possible for American growers to use no-till production on 52 million acres, preventing 304 billion pounds of soil erosion annually.
- Herbicides substitute for the use of cultivation and laborers for hoeing weeds. To maintain current crop yields with laborers for weed removal, 69 million additional farm workers laboring for 11 billion hours would be required each summer in the U.S.

Weeds are everywhere. Every acre of soil contains 50-300 million buried weed seeds that can stay viable underground for several decades. 2.5 million weeds emerge every year on every acre of cropland. Weeds compete with crops for water, nutrients, space, and sunlight. These weeds must be controlled to prevent crop yield losses.

Key Crops	Acres	% Treated w/ Herbicides	Value (\$ million)	% Loss w/o Herbicides
Corn	75,752,000	98	19,209	20
Cotton	15,787,000	95	3,384	27
Onions	167,000	88	703	43
Peanuts	1,543,000	97	1,003	52
Potatoes	1,267,000	93	2,591	32
Soybeans	74,105,000	96	12,446	26
Sugarbeets	1,371,000	98	1,113	29
Wheat	59,617,000	55	5,553	25

Note: Data presented in this summary represent 2002 crop year estimates.

Source: Gianessi and Sankula, The Value of Herbicides in U.S. Crop Production, National Center for Food and Agricultural Policy, April, 2003.

Available at http://www.croplifefoundation.org/cpri_benefits.htm

Companion photographs can be found at http://www.croplifefoundation.org/cpri_photolib.htm

The findings of this study were endorsed by 28 commodity groups.

For more information, please contact the Crop Protection Research Institute:

Leonard Gianessi, Director
202-872-3865

lgianessi@croplifefoundation.org

Nathan Reigner, Research Associate
202-872-3866

nreigner@croplifefoundation.org

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State	Total Benefits of Herbicide Use (\$ million)	Soil Erosion Prevented w/ Herbicide Use (million lbs.)	% Crop Loss w/o Herbicide Use (selected crops)
ALABAMA	243.8	5,392	Peanuts -75, Cotton -25
ARIZONA	131.7	4	Cotton -30, Lettuce -13
ARKANSAS	816.6	4,381	Rice -53, Soybeans -80
CALIFORNIA	1,258.4	5	Carrots -45, Onions -35
COLORADO	200.0	1,540	Dry Beans -23, Onions -23
CONNECTICUT	1.6	37	Peaches -12, Sweet Corn -12
DELAWARE	41.0	748	Soybeans -35, Sweet Corn -30
FLORIDA	841.2	140	Strawberries -55, Sweet Corn -17
GEORGIA	728.5	5,657	Cotton -65, Peanuts -60
IDAHO	444.9	1,402	Potatoes -35, Sugarbeets -40
ILLINOIS	1,842.8	48,731	Corn -22, Soybeans -22
INDIANA	803.7	20,615	Cucumbers -59, Soybeans -15
IOWA	1,968.5	41,466	Corn -25, Soybeans -29
KANSAS	479.1	11,357	Soybeans -15, Wheat -10
KENTUCKY	147.7	11,420	Corn -15, Soybeans -28
LOUISIANA	499.9	1,297	Rice -53, Sugarcane -44
MAINE	40.1	4	Apples -45, Blueberries -67
MARYLAND	84.1	4,391	Corn -31, Soybeans -25
MASSACHUSETTS	20.1	35	Cranberries -50, Tomatoes -30
MICHIGAN	641.8	4,162	Asparagus -50, Green Beans -60
MINNESOTA	937.9	1,648	Green Peas -15, Wheat -30
MISSISSIPPI	509.6	6,494	Rice -53, Soybeans -61
MISSOURI	876.6	31,066	Cotton -40, Soybeans -45
MONTANA	153.0	3,568	Potatoes -15, Sugarbeets -11
NEBRASKA	893.3	16,651	Corn -12, Dry Beans -25
NEVADA	4.9	<1	Potatoes -30, Wheat -25
NEW HAMPSHIRE	1.1	3	Apples -5, Sweet Corn -15
NEW JERSEY	68.7	842	Lettuce -50, Soybeans -55
NEW MEXICO	56.2	177	Cotton -32, Peanuts -23
NEW YORK	133.7	733	Apples -17, Potatoes -30
NORTH CAROLINA	533.2	11,652	Cotton -70, Peanuts -66
NORTH DAKOTA	621.0	4,194	Canola -45, Wheat -30
OHIO	837.7	10,090	Potatoes -52, Soybeans -32
OKLAHOMA	134.3	2,289	Peanuts -40, Soybeans -20
OREGON	199.3	891	Green Beans -30, Mint -58
PENNSYLVANIA	103.2	4,019	Grapes -25, Potatoes -22
RHODE ISLAND	0.3	<1	Apples -10, Potatoes -20
SOUTH CAROLINA	111.8	1,773	Peaches -40, Peanuts -52
SOUTH DAKOTA	524.5	10,786	Potatoes -21, Sunflowers -16
TENNESSEE	234.4	20,027	Cotton -25, Soybeans -30
TEXAS	1,394.9	1,610	Cotton -30, Sorghum -45
UTAH	9.4	31	Corn -35, Dry Beans -29
VERMONT	1.6	17	Apples -17, Sweet Corn -15
VIRGINIA	106.7	5,856	Peanuts -22, Tomatoes -40
WASHINGTON	739.5	2,808	Asparagus -55, Potatoes -55
WEST VIRGINIA	1.9	33	Peaches -25, Wheat -17
WISCONSIN	355.7	4,383	Potatoes -33, Soybeans -15
WYOMING	16.0	58	Corn -20, Dry Beans -23
TOTAL	20,795.8	304,483	