WASHINGTON (April 24, 2003) – Without herbicide use, U.S. crop producers would need tens of millions of additional laborers to control weeds or risk losing nearly all their crops or going out of business, according to a new study by the National Center for Food & Agricultural Policy.

The study concludes that herbicides not only are the most cost-effective weed control, they are essential if the United States is to maintain current yields, prevent soil erosion and provide economic benefits to crop producers. Hand-weeding is equally as effective as herbicide use for most crops, but costs and labor scarcity make it unlikely crop producers could substitute enough hand labor.

“Even if crop producers could increase their current force of 1 million workers to 7 million, they’d still lose 20 percent of their crop without herbicide use,” said Leonard Gianessi, NCFAP senior research associate. “Crop producers would need 70 million additional workers to control weeds completely and not lose any production, but the only way that could happen is if they grabbed every fourth person off the street to work in the field.”

The study also concludes that organic cropland in the United States, currently at 1 million acres, is unlikely to vastly expand because it depends upon costly and intensive hand-weeding labor.

Additionally, without herbicide use, U.S. crop producers would no longer be able to practice no-till farming because tillage would have to be used to prevent weed growth. As a result, soil erosion would increase by 304 billion pounds per year.

NCFAP researchers examined 40 crops grown throughout the United States and calculated that growers use 410 million pounds of synthetic herbicides to kill 550 trillion weeds on 220 million acres each year.

NCFAP estimated the value of herbicides by quantifying weed control methods such as hand-weeding and estimating the costs and effectiveness of available weed-controlling alternatives. NCFAP
estimated that total crop production would drop by 21 percent, equaling a 228-billion pound loss of food and fiber. If producers could not pass along their increased costs to buyers, the $7.7 billion increased production costs for less effective alternatives combined with lost production valued at $13.3 billion would result in a 40-percent net income drop of $21 billion.

“The $13.3-billion lost production could be made up with increased imports, but that would mean a $13.3 billion worsening of the trade balance,” Gianessi noted.

The complete study is available at www.ncfap.org. CropLife America funded the research, which is endorsed by 27 U.S. commodity groups and farm organizations.

The National Center for Food & Agricultural Policy is a private non-profit, non-advocacy research organization based in Washington, D.C. Originally established in 1984 at Resources for the Future, the center became an independent organization in 1992. NCFAP researchers conduct studies in four program areas: biotechnology, pesticides, farm and food policy, and international trade and development.

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