



Perspectives on Cotton

Pesticides & Cotton Production

A pesticide is any biological or chemical deterrent to natural crop predators and includes the sub-categories of: insecticides; herbicides; fungicides; bactericides and nematicides. Used in both conventional and organic production systems, pesticides help to protect crops.

It is estimated that 40% of the world's agriculture is lost each year to pests.¹ The safe and efficient use of pesticides is a valuable tool to ensure stable and steady supplies of food and fiber for a growing global population.

The cotton industry actively pursues efficiencies in all aspects of production, including pesticide management. Currently, the global cotton industry accounts for 6.4% of global pesticide sales.²

Cotton growers in the United States make 50% fewer pesticide applications than the generation before them.³ Among the reasons for this sharp decline in the U.S. is the introduction of *Bt* cotton in 1996.



Cotton
Incorporated



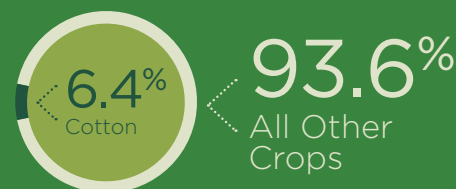
Pesticides & Cotton Production

Maximizing Efficiencies & Safety

Cotton Uses a Small Percentage of Pesticides

A credible and unbiased source for information on cotton's pesticide use is Cropnosis, an independent company that monitors agrochemical sales around the world. According to their 2010 data, the global cotton industry accounts for 6.4% of worldwide pesticide sales; 14% of which are insecticides.⁴

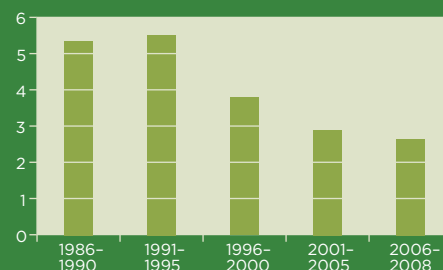
Cotton Accounts for 6.4% of Global Pesticide Sales



Science Advances Reduced Insecticide Applications for Cotton

Modern pesticides are relatively young, not coming into widespread use until the 1940s. Since then, advances such as the introduction of *Bt* cotton in 1996 have enabled U.S. growers to significantly reduce the number of insecticide applications necessary to protect cotton crops.

Decline in U.S. Cotton Insecticide Applications Since 1996⁵



Cotton Pesticide Use Strictly Regulated & Controlled

In the United States, agricultural pesticides are regulated by a range of local, state, and federal organizations including: the United States Department of Agriculture, the Food & Drug Administration, and the Environmental Protection Agency.

Agencies That Regulate & Control U.S. Cotton Pesticide Use



No Pesticide Residues on Raw Cotton Fibers

Cotton plants are most vulnerable to pests during the early growth stages—long before the boll opens to reveal the fibers it contains. The opening of the boll signals the completion of the growth cycle. Because the plant is no longer vulnerable to pests at this stage, no pesticide applications are made after the boll opens.

In addition, the Bremen Cotton Exchange regularly tests raw cotton fiber from around the world for the presence of pesticides. U.S. cotton samples consistently receive an “n.d.”, or “not detected” designation.⁶

No Pesticides Are Applied to Exposed Cotton Fibers



Closed Boll



Open Boll

For more information and citations, please visit <http://cottontoday.cottoninc.com>.

Citations

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- 1 Journal of Agricultural Science (2006), 144, 31–43. f 2005. Cambridge University Press.
- 2 Cropnosis, 2009.
- 3 Williams, M.R. 2012. Cotton insect losses 2011. Presented at the 2012 Beltwide Cotton Conferences, Orlando, Florida, January 3-6, 2012. Pp. 1013-1037.
- 4 Cropnosis, 2009.
- 5 Williams, M.R. 2012. Cotton insect losses 2011. Presented at the 2012 Beltwide Cotton Conferences, Orlando, Florida, January 3-6, 2012. Pp. 1013-1037.
- 6 Available at: <http://www.baumwollboerse.de/index.php?l=2&n=16,0,0>