

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 21 2002

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

ADDENDUM TO MEMORANDUM

SUBJECT: Description of Glyphosate Use in the U.S. as a Basis for Comparison to Glyphosate Use in Colombia for Coca Eradication

FROM: Virginia Werling, Biologist
Herbicide and Insecticide Branch

Virginia Werling 08/19/02

Timothy Kiely, Economist
Economic Analysis Branch
Biological and Economic Analysis Division (7503C)

*Stephen Smeadman for Timothy Kiely
08/19/02*

TO: Jay Ellenberger, Associate Director
Field and External Affairs Division (7506C)

THRU: Arnet W. Jones, Chief
Herbicide and Insecticide Branch
Biological and Economic Analysis Division (7503C)

Arnet W. Jones 08/19/02

BEAD would like to report additional information on the use of glyphosate in domestic forestry applications and in international sites found through research subsequent to issuance of the original memo (dated June 28, 2002).

BEAD was asked to report on the use of glyphosate in forestry sites since it seemed similar to the use pattern for coca eradication. However, it is not clear how closely this use approximates that for coca eradication. Glyphosate is typically applied to forestry sites using helicopters at air speeds of 50-70 knots (about 60-80 miles per hour). Application to forestry sites by fixed wing aircraft, if practiced at all, is extremely rare (1). The recommended rate of application for pine release (conifer release) is 1.5 to 2 pounds active ingredient per acre.

Aerial application to other sites comprises less than one percent of the total amount of glyphosate applied in the United States (3).

In addition to surfactants, drift control agents may be added to the spray mixture for forestry uses in an effort to prevent drift to off target sites. BEAD has not investigated the prevalence of use or the effectiveness of these products.

BEAD estimates total global use of glyphosate to be between 350 and 360 million pounds of glyphosate per year. Annual use in the United States approaches 100 million pounds of active ingredient and an estimated 250 to 260 million pounds of glyphosate is used outside of the United States. Use of glyphosate in Colombia accounts for between four and five million pounds of this use. Primary sites in Colombia include coffee, bananas, pasture-land and rice (3).

REFERENCES:

(1) Personal communication between Virginia Werling, United States Environmental Protection Agency and John Taylor, United States Forest Service on August 9, 2002.

(2) Hamilton, R.A. "2002 North Carolina Agricultural Chemicals Manual - Chemical Weed Control In Forest Stands" Extension Forest Resources Department, North Carolina State University. Available on-line at <http://ipmwww.ncsu.edu/agchem/chptr8/821.pdf>

(3) United States Environmental Protection Agency Proprietary Data.