

Professional applications of pesticides and fertilizers . . . a \$440 million market

Pesticides and fertilizers for professional applications are a big business in the United States on their own, and need not take a back seat to the farm and consumer markets for these products. In 1976, about \$440 million will be spent at formulator's level by 16 market segments including golf courses, landscapers, schools and colleges, and others for products to fertilize lawns, kill weeds, control insects and perform similar functions.

The products

The products, about twelve in all, fall into three broad functional categories. Pesticides are the most important group with consumption of \$250 million in 1976 followed by

fertilizers with \$165 million, as shown in Figure 1. All values are in formulator's dollars.

Herbicides are the leading pesticide with \$105 million. They are used by the most end users in significant quantities as shown in Table 2. Insecticides are a close second, at \$90 million. The two pesticides together account for nearly 80 percent of all pesticide sales.

The markets

Golf courses, and landscaping and lawn service companies share the lead in total purchases. Horticultural firms (flowers, shrubs, and turf), structural pest-control operators, highways, forestry, government agencies, electric utilities, schools and colleges, and railroads are the other important market segments. Minor end uses include industrial weed control, mosquito abatement, cemeteries, airports, and asphalt pavers.

Golf courses use all products except rodenticides, mainly to maintain their fairways, tees and greens. The actual consumption of the various products varies by the geographic location, size of the course and ownership. For instance, courses in the south tend to use more fertilizers, insecticides and nematocides than those in the north. On the whole, private courses are better maintained than municipal courses and spend proportionally more for pesticides and fertilizers.

Landscapers concentrate on planting and maintaining shrubs and other ornamentals while lawn-service companies chiefly fertilize lawns and apply herbicides and insecticides as needed.

The horticultural segment includes firms which grow cut and potted flowers, ornamental trees and shrubs, and sod. Although consumption is heavy in fertilizers, this end use also consumes every product type except aquatic pesticides and rodenticides.

Since structural PCO's concentrate on exterminating insects in and around buildings, their major product is insecticides. However, they are also important consumers of rodenticides. In addition some PCO's also control insect and plant pests on ornamentals and turf and buy herbi-

Table 1
U.S. PROFESSIONAL MARKET FOR PESTICIDES AND FERTILIZERS 1976

Product	\$ Million	% Of total
PESTICIDES		
Herbicides	\$105	24%
Insecticides	100	22
Other-a	45	10
Total	250	56
FERTILIZERS	165	38
SOIL CONDITIONERS ..	25	6
TOTAL	\$440	100%

Includes fungicides, aquatic pesticides, nematocides, rodenticides and growth regulators.

cides, insecticides and fungicides for these uses.

Highway and road departments, especially at the state and county level use herbicides to kill all vegetation along guard rails and similar areas and to control brush along roadways. Political considerations, in which people are employed to mow grass and otherwise maintain surroundings, hurts the use of herbicides to improve turf areas.

Electric utilities use selective herbicides to control brush under transmission lines, and take soil sterilants and contact herbicides to control vegetation at substation. Fertilizers are used chiefly to promote rapid growth along transmission lines after construction or erosion.

Railroads also buy herbicides to kill all vegetation in the road bed and to control the brush along the edges. Among forestry companies the use of fertilizers for mature stands is a controversial subject. Some large companies are heavy users, others use none. Herbicides find application in clearing an area for fresh seedings and in stand release, the killing of unwanted species to promote the growth of desirable trees.

Contract applicators

Contractors are important in applying herbicides for electric utilities, railroads, and forestry companies. Most applicators specialize in one of these industries and do little work outside their specialty. In forestry they are most active in insecticides. Interestingly, the choice of product varies more by industry than by individual company. In some industries the company that hires the contract sprayer tightly controls the products used, in others the choice is entirely with the contract sprayer. Application from the air, either by helicopter or airplane, is important in electric utilities, forestry, and for some forms of mosquito control.

Suppliers

Literally hundreds of suppliers formulate products for this industry. Pesticides move through as many as five tiers from toxicant manufacturer to end user, as shown in Figure 2. In some cases a manu-

Continued on page 37

Figure 1

CONSUMPTION BY PRODUCTS IN THE PROFESSIONAL MARKETS FOR PESTICIDES AND FERTILIZERS 1976 TOTAL \$440 MILLION

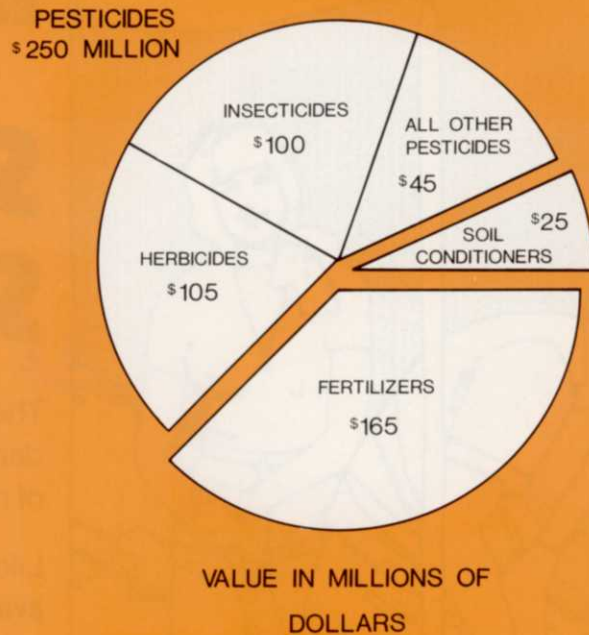


Figure 2

TYPICAL DISTRIBUTION PATTERNS FOR PESTICIDES FOR PROFESSIONAL USE

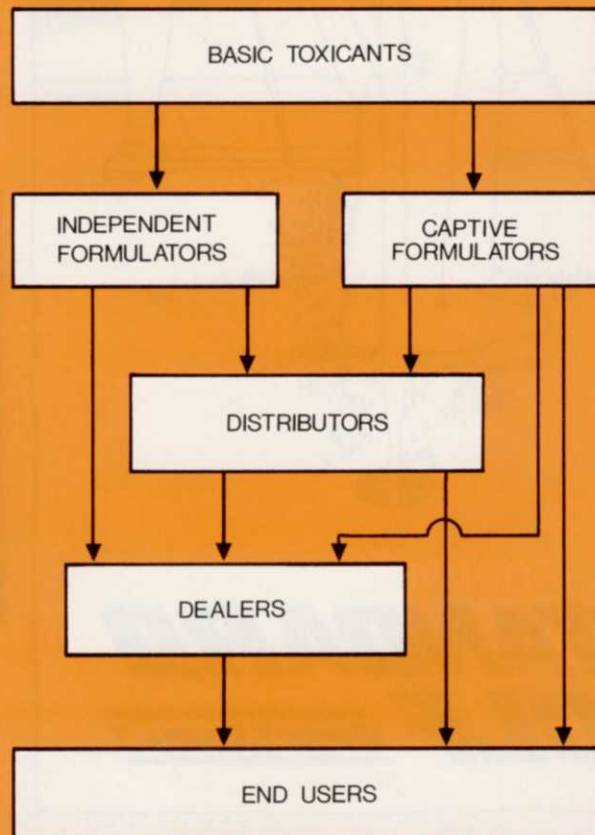


Table 2
PRODUCTS AND MARKET SEGMENTS FOR PESTICIDES, FERTILIZERS,
AND SOIL CONDITIONERS FOR THE PROFESSIONAL MARKET

Market segment	Herbi- cides	Ferti- lizers	Insecti- cides	Fungi- cides	Soil condi- tioners	Growth regu- lators	Aquatic pesti- cides	Nemati- cides	Rodenti- cides
Airports	X	X	X	—	—	—	—	—	—
Aquatic pest control	—	—	—	—	—	—	X	—	—
Asphalt paving	X	—	—	—	—	—	—	—	—
Cemeteries	X	X	X	—	—	—	—	—	—
Electric utilities	X	X	—	—	—	—	—	—	—
Forestry	X	X	X	—	—	—	—	—	—
Golf courses	X	X	X	X	X	X	X	X	—
Government agencies ..	X	X	X	X	X	X	X	X	X
Highways	X	X	X	—	—	X	—	—	—
Horticulture	X	X	X	X	X	X	—	X	—
Industrial weed control ..	X	—	—	—	—	—	—	—	—
Landscaping and lawn service	X	X	X	X	X	—	—	—	—
Mosquito abatement	—	—	X	—	—	—	—	—	—
Railroads	X	—	—	—	—	—	—	—	—
Schools and colleges	X	X	X	—	X	—	—	—	—
Structural PCO's	X	X	X	X	—	—	—	—	X

applications

Continued from page 35

factorer of the toxicant also formulates and sells direct to a large user, for example, a major contract sprayer for railroads. By contrast, when a PCO buys a small quantity of herbicides from a dealer, products move through all tiers.

The top 19 suppliers listed in Table 3 hold 52 percent of sales of pesticides and fertilizers for professional uses. An additional 94 firms supplied 32 percent, together these 113 companies hold 84 percent of the business.

The future

Although overall consumption will grow at a steady rate of about 3.5 percent annually to \$500 million in 1980, as measured in constant dollars several segments will increase at rates far above the average. Consumption by forestry, asphalt paving, structural pest-control operators, and mosquito-abatement groups will all grow at a good rate.

The opportunities

This business represents important opportunities for alert suppliers. For example, government legislation will force the replacement of chlordane for many applica-

Table 3
THE MAJOR SUPPLIERS OF PESTICIDES AND
FERTILIZERS TO PROFESSIONAL MARKETS

Company	Chief products
Amchem	Herbicides
Chevron	Insecticides
Ciba-Geigy	Herbicides
Diamond Shamrock	Herbicides
Dow	Herbicides
Du Pont	Herbicides
Elanco	Herbicides
Kerr-McGee	Fertilizer
Lebanon Chemical	Fertilizer
National Chemsearch	Fertilizer
Occidental	Fertilizer
Premier Brands	Peat moss
Rollins	Insecticides
O. M. Scott	Fertilizer
Southern Mill Creek	Insecticides
Swift	Fertilizer
Thompson-Hayward	Herbicides
U.S.S. Agri-Chemicals	Fertilizer
Velsicol	Herbicides

tions and new products will be required. Furthermore, government and environmental pressures are also being placed on other products including organophosphates, and replacements must be found. Other opportunities center around (1) improved products including effective growth regulators, and (2) new, rela-

tively untapped markets including asphalt paving, forest fertilization, and lawn service.

Details are available in a new 532-page survey, *The Professional Markets for Pesticides and Fertilizers*, available on subscription only from C. H. Kline & Co., Fairfield, N.J. □