Weight of evidence' favors 2,4-D

WASHINGTON—If several studies have shown that the herbicide 2,4-D is linked to cancers in both man and dogs, then why is it still on the market?

Simple: much more evidence suggests that exposure to the popular herbicide does not cause cancer, says Dr. George Carlo from the Health & Environmental Sciences Group, Washington D.C. The herbicide is the most intensively studied chemical of its kind.

And it's one of the most widely used herbicides with about 55 million pounds being applied a year in North America, most going to agriculture but almost 7 million pounds on turfgrass.

The 2,4-D/cancer hypothesis first surfaced in 1977 when the Swedish scientist Hardell suggested it might be linked to three rare forms of cancer. But the bigger bomb fell in 1986 with the publication of the Kansas Farm Worker Study.

Yes, that study said, there does appear to be a connection between 2,4-D and a form of cancer known as non-Hodgkins lymphoma. It claimed that farmers who had more than 21 exposures a year to 2,4-D appeared more likely to develop the cancer.

Many researchers now feel, however,
that the methodology used in that particular study, and in the recent work linking canine cancer to 2,4-D, does not tell the whole story.

"The weight of evidence does not support the hypothesis that 2,4-D causes cancer," says Carlo, adding that seven different studies conducted in four countries "did not support the hypothesis."

This evidence, most of it gathered since 1980, has been reviewed by several independent government and academic bodies.

A long history—Indeed, an incredible amount is known about 2,4-D, which was developed in the early 1940s, made commercially available in 1947 and is still widely used today because of its effectiveness and low cost.

The major route of 2,4-D exposure to humans is through their skin, says Carlo. But 2,4-D is not metabolized by humans, nor does it build up in the body. Carlo says it's excreted from the body, usually without a trace, within three days.

Beyond that, exposures experienced by applicators in the work-a-day world—assuming they follow product safety instructions—"are real, real low," says Carlo.

Igniting the press—Even so, a connection, any connection, between 2,4-D and cancer seemingly always ignites an immediate and widespread publicity, even though the study's authors cautioned against drawing too many conclusions from their results.

"Why was the dog study published: because it was the first of its kind," says Carlo. "And the media ran with it."

However, when a 1990 Nebraska farm worker study purported to establish a tenous link between repeated exposure to 2,4-D and cancer, it didn't create the same controversy as other reports.

"Millions of dollars were spent between 1986 and 1989 to put the issue in perspective and by the time the Nebraska study came out, there was just a thud," Carlo says.

Carlo, who describes himself as both an epidemiologist and an attorney, says 2,4-D is the most exhaustively tested product of its kind. "We have both an animal and a human data base," he says.

Congress extends tax credit rules

WASHINGTON—Small business owners across the country received good news in December: the United States Congress extended five important tax credits before taking its winter recess.

According to a news release from the American Nurserymen's Association, small businesses can benefit from the new credits through June, 1992.

These tax credits apply to:

Health insurance for the self-employed—Tax-payers can deduct 25 percent of health insurance costs for themselves, their spouses and their dependents.

Targeted jobs—If you hire personnel from certain target groups, you are eligible for another type of tax credit.

Energy investment—If you have solar or geothermal heating equipment at your place of business, you can receive a 10 percent credit.

Employer-provided education benefits—You can credit up to $5,200 of gross income for tuition and related expenses paid by the employer. This does not include graduate-level courses, though.

Research and development—For details, check with your accountant.

The A.A.N. urges small business owners to check with their accountants before filing 1991 taxes (remember the deadline: April 15th!) for further information.