

## Industrial Roundup Uses Approved by EPA

Monsanto Company's new Roundup herbicide has received Environmental Protection agency registration approval for industrial uses. Roundup is a postemergence, non-selective herbicide which controls a broad spectrum of annual and perennial weeds of both grass and broadleaf species.

The EPA registration permits the use of Roundup for industrial commercial applications, such as the control of weeds along highway,

railroad, fuel and power-transmission rights-of-way, airport runway areas and other similar areas with problem weeds.

A company representative said that Roundup effectively controls more than 100 species of annual and perennial weeds, including perennials with well-established root systems such as johnsongrass, quackgrass, dallasgrass, paragrass, Canada thistle, bermudagrass and common mullein.

Further information for the industrial use of Roundup is available by writing to: Agricultural

Division, Monsanto Company, 800 N. Lindbergh Blvd., St. Louis 63166.

## Chemist Predicts Lasting Fertilizer Shortages

Shortages of one sort or another are plaguing most green industry firms. But diminishing petrochemical supplies are causing across-the-board headaches for large and small firms alike.

A recent issue of **Chemical and Engineering News**, the weekly newsmagazine of the American Chemical Society, reported that the current world fertilizer shortage will continue indefinitely, perhaps for the rest of human history.

Although this shortage is serious, it does not mean the world will have widespread famine, says Dr. Raymond Ewell, recently retired vice president for research at the State University of New York at Buffalo, and widely recognized authority on chemical economics.

"A shortfall doesn't necessarily mean that we won't have enough supplies to feed people at somewhere just above a starvation diet," he explains. "But much depends on how our available supplies are divided up."

Ewell cites slowing the world's population growth as the fundamental issue we now face. And he foresees that the rate of world population growth will peak sometime during the 1970's at a little more than two percent a year.

"This will be one of the crucial dates in world history," he states. "For the first time ever, the rate will have begun to decline."

Even so, he adds, the growth rate will decline only very slowly and will probably continue at close to the two percent figure until the year 2000.

Right now, high food prices are serving as a magnet for fertilizer, the article continues. The high demand and rising prices are attracting new investment into the fertilizer industry.

"But the big question," says Ewell, "is whether this will pull in new money fast enough to keep up with demand."

The world will have to spend about \$8 billion annually on new fertilizer plants and related facilities now, and about \$12 billion by 1980, just to keep pace with increasing demand, he estimates.

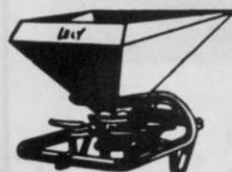


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Even this will not help overcome past shortages, he notes. "In addition, the competition for investment funds from nuclear power, coal conversion, and a number of other industrial projects makes it unlikely that the fertilizer industry will attract all the new capital it needs.

"Another bottleneck," Ewell says, "is the world's relatively small pool of engineers qualified to design and build large-scale fertilizer facilities." Only about 4,000 to 5,000 engineers are properly prepared, he estimates, and these must be spread over other industries as well.

While fertilizer will continue to be in short supply, the actual amount produced will rise, he says. During the next few years, capacities will increase at about seven percent a year, and by the turn of the century the industry will rank second only to petroleum in tonnage of production.

The problem is that demand will rise even faster. And in underdeveloped countries, where population is growing most rapidly, the problem will be magnified.

Ewell calculates that a country must build a new 1,000-ton-a-day ammonia plant (the basis of the fertilizer industry) for every increase of six million people. For a country like India, he explains, this means an additional two and a half plants a year, just to keep pace.

### Shigo Receives Award

Dr. Alex Shigo has been given an Award of Achievement by the New York State Arborists Association. His work has received attention among his peers at universities and in governmental agencies, and he is recognized internationally for his contributions to the field of tree research.

### New Jersey Sod Industry Triples in Last Decade

New Jersey's sod industry has tripled in size during the last decade, according to Roy M. Atkinson, head of the state's certified sod program.

Atkinson has conducted a survey of the sod industry every three years since 1965. The latest shows that New Jersey growers now have a total of 5,837 acres in sod produc-

tion, compared with 2,997 acres in 1965 and 5,050 acres in 1971.

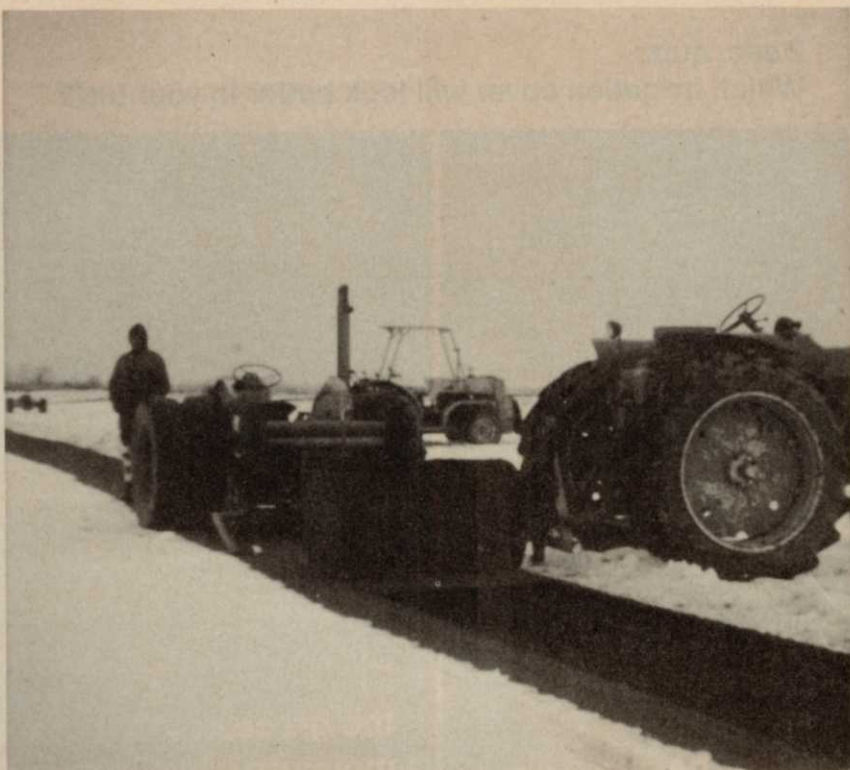
The 1974 survey shows 33 active sod producers in New Jersey. Seventeen are growing less than 50 acres; two, between 50 and 99 acres; nine, between 100 and 499 acres; four, between 500 and 1,000 acres; and one, more than 1,000 acres. Five growers are producing 58 percent of the total sod sold. Twelve growers have been in business more than 10 years and one producer has been selling sod for 37 years.

Three years ago Atkinson found that 66 percent of the acreage was

devoted to growing one variety of Kentucky bluegrass. Today, 66 percent is in blends of more than one variety of bluegrass, 26 percent planted to one variety and 7 percent in mixtures of species.

Asked where they marketed their sod, 26 of the growers said they sold directly to homeowners, 25 to landscapers and 22 to garden centers. Other markets were industry and golf courses.

Almost unanimously, sod producers believe that their industry will expand in the future; only one grower anticipated a decline.



## THE BECK SOD-O-MATIC PERFORMS IN SNOW COVERED MICHIGAN

At Beck Manufacturing recently, we received a letter from Bill Schultz of Roseville, Michigan. Mr. Schultz tells us: "The harvester worked well after plowing the snow in November and December. We were cutting in stripped-out peat bogs about eight feet below road level."

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