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-

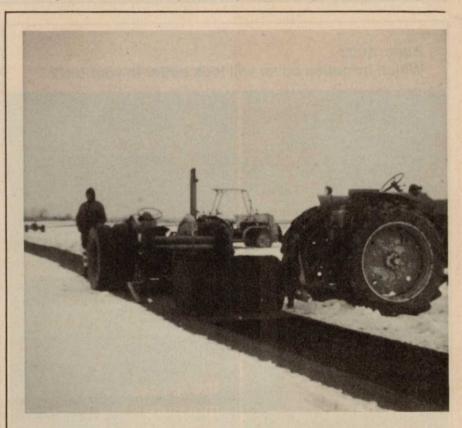
tion, compared with 2,997 acres in 1965 and 5,050 acres in 1971.

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."

For more information on the Beck Sod-O-Matic is a proven system, no matter where or when you sod. For more information, write Box 752, Auburn, Alabama 36830.

