### **RAISES AND LOWERS MANUALLY**

# "Affordable" Drill Transport System

"Response from the more than 100 farmers who've field tested it, has been tremendous," says Allen Andre, president of Apollo Distributing Corp., Bismarck, N. Dak., of the company's new "affordable" system for hitching 2, 3 or 4 drills together.

The new transport system is unique in that it raises and lowers manually. A modified hi-lift jack is simply fitted to a lift leg at each wheel to raise the drills for transport. It takes about 1 min. at each wheel and saves several thousand dollars over all-hydraulic automatic systems, says Andre.

"It's primarily designed for 2 to 4 drills. Anyone with more drills will probably invest in a hydraulic system. So far as we know, it's the most inexpensive drill hitch available and the major manufacturers don't offer a workable system for 2 drills," Andre points out.

The Apollo system, which becomes a permanent part of the drills, is designed for nearly all makes of drills in any widths or multiples. It lets the operator switch from field to road position in a few minutes.

Comes complete with end tow hitch and 9.52 by 15 implement tires. A 2-drill model sells for \$2,250. The folding field position hitch is extra.



A hi-lift jack is used to raise and lower dills on transport.

For more information, contact: FARM SHOW Followup, Apollo Products, Box 725, 135 Airport Road, Bismarck, N. Dak. 58501 (ph 701 255-4700).



Self-contained mower cuts 36 in. swath.

#### HAS ITS OWN MOTOR

# All-Terrain Mower For 3-Wheelers

You can turn your three or four-wheel all terrain cycle into an all-terrain mower with a new self-contained rotary mower from Adventure Vehicles, Inc., Monroe, La.

The new 36-in. wide Trailcutter has its own 8 hp. motor, along with large 16-in. flotation tires. It cuts from 2 in. to 10 in. in height, leveling anything up to 1½ in. in dia. It has the maximum legal blade speed and is shielded with a metal housing all the way around.

The mower can also be used behind

tractors without pto. The variable speed of the belt-driven blades is controlled by the engine throttle.

Equipped with a manual start 8 hp. Briggs and Stratton motor, the mower sells for \$795. A Kawasaki 7½ hp. electric start motor, and a Honda electric start motor, are also available at \$895 and \$949, respectively.

For more information, contact: FARM SHOW Followup, Adventure Vehicles, Inc., 114 Melvyn Drive, Monroe, La. 71203 (ph 318 343-3886).

## LUPINES FROM FRANCE — "A LOW-COST ALTERNATIVE TO SOYBEANS"

## New Crop Gaining Foothold In Midwest

Lupines, a crop that's in big demand in France and other European countries, has contracted out quickly to farmers in the upper Midwest who are scheduled to deliver some 12 million bushels of the new crop to the French government over the next three years.

Billed as a low-cost alternative to soybeans, Lupines are a square white nitrogen-fixing bean that's high in protein — at 32 to 40% protein — and slightly bigger than the soybean at 1,000 beans per pound versus, 2,000 to 3,000 beans per pound for soybeans. Promoters say they are cheaper to grow and easier to feed to livestock than soybeans.

"They don't have to be processed like soybeans to feed to livestock," says Ken Haman, general manager of Good Earth Agra Products, Inc., Perham, Minn., the company handling the new crop. "You can feed them directly to livestock at up to 20% of the ration without processing. They can either be left whole or

ground and fed directly to livestock."

One acre of lupines produces an average yield of beans of 33 bu., or about a ton of beans with 85% of the feed value of soybeans. For northern Minnesota, costs have been pegged at around \$100 to \$140 per acre and the company guarantees growers about \$7 per bu.

Although lupines show signs of being an excellent livestock feed, nearly all of this year's production will be shipped to France. The company has negotiated a contract with the French government to deliver 12 million bu. of lupines over the next three years, starting with 220,500 bu. in 1984 and growing to 6.5 million bu. in 1986. Some 200 farmers have already been signed up this year, and word is spreading fast among those farmers eligible.

Lupines are a cold weather crop that grows well in light sandy soils with a ph of from 5.0 to 6.5 They can be planted before corn as the seedlings withstand cold. The company



Lupines are small square beans that don't require processing to feed to live stock.

says the ideal growing areas are in Minnesota, Wisconsin, Michigan, and Maine, as well as some southern areas of Canada. The amount of seed available for 1984 is limited and most of the available acres have already been contracted.

Researchers at Michigan State, who are credited with perfecting the North American lupine, are now working on a warmer weather bean. The lupine has a main stalk and four secondary stalks. The main stalk has five or six pods and the others have about four pods each, with each pod containing five to six beans. The plant fixes about 70 lbs. of nitrogen

per acre. It's normally planted at a rate of 150 lbs. of seed per acre in 6 or 7-in. spaced rows.

The Europeans have used lupines for years as livestock feed and for human consumption. "Even the Egyptians grew lupines years ago," Haman told FARM SHOW.

Even though most of the crop has been contracted for this year, the company is looking for growers for future years.

For more information, contact: FARM SHOW Followup, Good Earth Agra Products, Inc., P.O. Box 158, Perham, Minn. 56573 (ph 218 346-2580).