

## "LIKE PUTTING TOOTH PASTE ON YOUR FIELDS"

# New Fertilizer "Gel"

Fertilizer "gel" that looks like toothpaste but doesn't dissolve or leach away from the soil will soon be on the market, according to a Texas manufacturer.

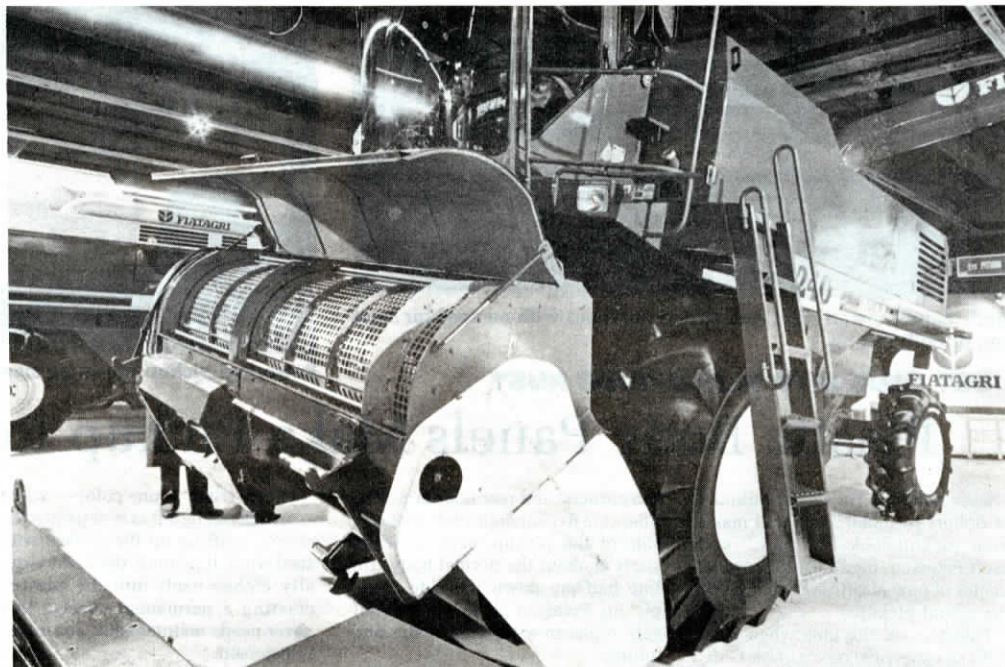
Rancher Cliff Lauderdale has operated a sideline fertilizer and manufacturing business for 20 years. He got the idea for a gel fertilizer as a way to get away from the leachability of conventional dry and liquid fertilizers.

"It won't absorb into the soil or leach away. It remains suspended in a gel state in the soil until roots of plants, which are naturally attracted to it, take it up. Because it doesn't leach away you can use much less of it for the same results and you won't pollute the groundwater," notes Lauderdale.

Prototype testing of both the gel, and air-powered equipment to inject the gel into the soil, is now in full swing. Other uses include insecticides which will be carried in the gel, along with an attractant so that insects will be "baited" and then killed.

Lauderdale says the gel is unique in that a special chemical keeps it sealed up so its contents are not released into the soil around it. He says it'll cost slightly more to apply to fields but will return four times its cost in benefits. He plans to begin marketing the new product in early 1987.

For more information, contact: FARM SHOW Followup, Cliff Lauderdale, Agri-Vator Mfg. Co., Rt. 1, Box 100, Caldwell, Tex. 77836 (ph 409 535-7505 or 535-4124).



(Photo courtesy Implement & Tractor)

New combine's separator mounts above feederhouse, just behind header (header not shown in photo).

## UP-FRONT CYLINDER GETS RID OF MAJORITY OF STRAW

# First Head-Separator Combine

You've never seen anything like this header-separator combine that's the first ever to be fitted with a separator cylinder right on the header for preliminary cleaning before grain enters the main rotary cleaning cylinder.

The new Laverda combine, built by Fiat in Italy, is the hottest new farm machine in Europe this summer. A few early production models are already in use on farms there.

Operating speeds and cleaning capacity are boosted by the new design. The up-front 8½-ft. long cleaning separator mounts on the feederhouse directly behind the cutterbar. Most of the straw is removed by the cylinder and dropped in a windrow along the left side of the header.

John King, a Hesston Corp. representative (Hesston handles Fiat trac-

tors in the U.S.) says the combine is especially suited to tall crops with lots of straw that must be cut low to the ground because of lodging. "It gets rid of the straw first and lays it in a good windrow alongside the combine. This new-style combine makes it much easier to bale straw," says King.

The hydrostatically-controlled, up-front separator automatically adjusts to varying ground conditions. Electronic monitoring systems automatically monitor every aspect of the machine, adjusting for amount of grain, ground speed, grain loss and so on.

The up-front separator cleans grain pneumatically. An "accelerator" throws grain, uniformly distributed by two contra-rotating screws, against a current of air. On slopes,

deflectors inside the combine are swivelled automatically by a pendulum to evenly distribute the grain load on sieves.

The combine will be produced in four sizes ranging in cutting width from 14.5 to 22.5 ft. The largest model may be the most expensive European combine to date at about \$150,000.

King told FARM SHOW that no decision has been made yet as to whether Hesston will market Fiat's new Laverda combine in the U.S. "It's safe to say it won't be on the North American market in the near future," he says.

For more information, contact: FARM SHOW Followup, Giuseppe Lorezi, Fiat, Corso Serrucci 112, 10138 Torino Italy.

# High Capacity 12-Volt Powered Air Compressor

"It's the only high capacity 12-volt air compressor that'll let you run high torque air-powered hand tools anywhere your pickup can go," says Tom Panka, Thunderbird Engineering and Manufacturing.

The new air compressor reaches 125 psi in less than a minute and can be used to power 400-lb. torque air tools. Its operating range is 70 to 120 psi. The special-built electric motor will produce 3 hp. with a good battery.

Key to compressor is the special-built electric motor. It's housed in a Delco starter case but is wrapped with copper bars rather than wire, each of which is coated with ceramic

to stand up to the high heat generated. The motor has been widely used as a truck box shaker motor on highway sand and gravel trucks.

"Conventional 12-volt starter motors can't stand up to the wear and tear of this type of application," says Panka, noting that the starter motor draws 30 amps at 30 psi pressure and as high as 160 amps at 100 psi. It only draws the upper amount for a few seconds, however, just before it shuts off.

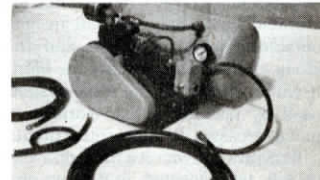
"Other under-the-hood pickup air compressors are belt-driven by the engine. They're expensive and have been primarily used to inflate tires, not to work as a high quality, on-

the-go compressor," notes Panka.

Panka, who has his own farming operation, says the compressor pays its way in time saved working in the field on equipment, such as putting on and taking off cultivator shields, or many other types of maintenance work.

The compressor mounts either under the hood or in the pickup box. Panka recommends running heavy welding cable from the compressor to the battery for the best connection.

The new compressor sells for \$429 with a 4-gal. tank. An optional 10-gal. tank is available, as well as special under the hood models. The compressor is \$395 without the tank.



Pickup compressor is the first to provide enough air pressure in the field to power high-torque air tools.

For more information, contact: FARM SHOW Followup, Tom Panka, Thunderbird Engineering & Manufacturing, HCR-3, Box 372, Deer River, Minn. 56636 (ph 218 798-2759).