

They Turn Chicken Manure Into Odorless Fertilizer Pellets

The 180,000 layer hens at Asmus Egg Farms, Inc. in Winthrop, Minn. produce plenty of manure. Instead of looking at that as a problem, fifth generation brothers Adam and Michael Asmus have turned it into a business opportunity. Using technology for drying and pelletizing, they sell their odorless, organic fertilizer to gardeners and farmers.

"We are trying to be proactive with regulations about where and when we can apply manure," says Adam.

Because it goes through a heat treatment, the manure can be used anytime, which is especially useful for organic growers for farmers markets and CSAs.

The pellets are handy to use and slowly release nitrogen into the soil to last longer.

Another advantage to pelletizing is the savings in transportation costs for growers who buy in bulk.

"By densifying it, the product is a much better value for the farmer. We can put 22 to 25 tons on a truck compared to 15 tons before pelletizing," Adam notes.

The brothers began processing this year, running about 18 tons of chicken manure to net 6 tons of pellets, three days a week. The heat-treatment process (over 180° F)

eliminates pathogens and odor without destroying nutrients. Without additional ingredients, the pellets are equivalent to a 4-3-2 all-purpose organic fertilizer that also contains calcium, magnesium and sulfur.

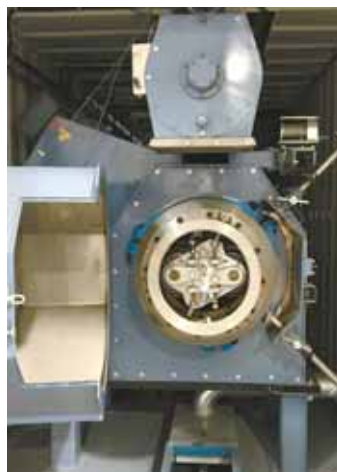
Their manure drying equipment was imported from Germany. They bought a pelletizer from Vecoplan Midwest (www.vecoplanmidwest.com).

The brothers add nutrients for blends that are 4-6-4 and 4-8-4 for vegetable and flower gardening. Plus, they offer biochar and biochar blends that add carbon to the soil for microbial health, water retention and soil structure.

"Biochar is relatively new, though it's an old idea. There's not a lot of awareness of it so we're having to educate," Adam says, noting that they bought a biomass heating system which produces biochar from Organilock in Kentucky (www.organilock.com).

The brothers are networking with garden centers, cooperatives and big box stores to sell their product, while continuing to do research and development to expand their line of products.

They sell High Island fertilizers through the business' website and through area stores



Asmus Egg Farms says its dehydrated, pelletized poultry manure makes great fertilizer. The manure drying equipment was imported from Germany.

in 1, 4 and 20-lb. packages (from \$3.99 to \$19.99). Loose bulk and 1-ton super sacks are also available.

"The 1 and 4-lb. packages are completely recyclable and resealable," Michael says.

Contact: FARM SHOW Followup, High Island, 28243 505th Ave., Winthrop, Minn. 55396 (www.highislandorganics.com; info@highislandorganics.com).

"No Mess" Chicken Plucker Works Fast

Yardbird says its new chicken plucker provides a quick, easy way to pluck poultry. It can fully defeather up to 2 birds at a time in 15 sec. or less.

The chicken plucker rides on 2 solid rubber wheels and is operated by a 1 1/2 hp. electric motor. It comes with 110 replaceable rubber fingers mounted inside a removable stainless steel tub. The fingers pluck the feathers while washing dirt from the skin. A small round discharge chute at the bottom of the bucket deposits feathers into a bucket.

You first soak the bird in a 150-degree scalding bath for 15 sec., then drop it into the plucker for another 15 sec. The company says all feathers and dirt will be removed without tearing the skin or breaking any bones. A 1 1/2 hp. electric motor spins the base at the bottom of the tub at 300 rpm's, while a built-in irrigation ring supplies water to help remove feathers from the bird and flush them through the discharge chute. The plucker base will stop spinning automatically when the tub is removed.

To clean up, just unlatch the tub and use a garden hose to spray out the debris.

Sells for \$449.99 plus S&H.

Contact: FARM SHOW Followup, Yardbird, 1160 8th Ave., Cumberland, Wis. 54829 (ph 800 345-6007; info@yardbirdpluckers.com; www.yardbirdpluckers.com).



Chicken plucker comes with 110 replaceable rubber fingers mounted inside a stainless steel tub. A built-in irrigation ring supplies water to help remove feathers from birds.



Dragline Trailer Unloads Square Bales

Rick Simmonds added 2 draglines to his 48-ft. long, 8-ft. wide trailer that carries 580 small squares and was built with one customer in mind.

"I sell hay to Mississippi State, but the spot I deliver to requires I unload off the back end," explains Simmonds. "I needed an easier way to unload quickly."

Simmonds started out with an old chicken hauling trailer that was missing its floor. He built a floor with a sunken dragline down the middle. Metal 3 by 6-ft. panels cover the dragline when the trailer is loaded with bales. As he unloads the bales, he uncovers the dragline, which carries bales to the back

of the trailer.

A second 16-ft. dragline conveyor hangs off the back and is raised or lowered by an electric winch.

Both draglines are powered by a geared-down electric motor.

Once the loaded trailer is backed into place at the university, unloading begins from the rear. "It used to be a terrible job, as we had to carry bales the length of a trailer to unload it," says Simmonds. "Now we're only carrying them a few feet."

Contact: FARM SHOW Followup, Rick Simmonds, 281 Richards Rd., Macon, Miss. 39341 (ph 662 361-8266).

Tire Sealant Pumping System

"Our new tire sealant pumping system hooks up to an air compressor to quickly pump sealant into tires, eliminating the need to do any hand pumping or to take tires off rims. It saves a lot of time and labor," says David Prickett, Neverlift Pump Systems (NLPS), Fresno, Calif.

The new system is designed to be used with 5-gal. buckets of Monster Seal tire sealant, which prevents flats.

"Hand pumping can take 13 to 14 min. per tire, with additional time spent reinflating each tire afterward. Our system works much faster," says Prickett. "We can put sealant into an 11R-22.5 truck tire in about 1 min. without the need to reinflate."

The pump mounts with an adapter to the top of the bucket lid. The system includes 2 hoses - one for the sealant and one to fill the tire with air (if it needs more). A pressure valve is built into the pump. The air hose is fitted with a core removal tool, invented by Prickett, that's used to remove the core from the tire's valve stem. The air inside the tire pushes the core up into the core removal tool and holds it there, creating an open line to the tire.

The operator then opens a valve, allowing the sealant to flow into the tire unobstructed, says Prickett. "A battery-operated meter on the pump assembly indicates the amount of sealant delivered into the tire."

The system comes with an air pressure gauge, allowing the operator to monitor air pressure settings to maintain the correct psi.

The modified pump was designed by



Monster Seal tire sealant pumping system hooks up to an air compressor to work fast.

Ingersoll Rand and works only with Monster Seal sealant.

A 5-gal. pail sells for \$299.95. The company also offers on-farm tire-filling service in limited areas.

Contact: FARM SHOW Followup, David Prickett, Neverlift Pump Systems, 7130 E. Tulare, Fresno, Calif. 93737 (ph 559 352-7071; neverliftpumpsystems@hotmail.com; www.ecotransportationproducts.com) or Malek Eco Transportation Products (ph 562 537-5456).



Trailer is equipped with 2 draglines, allowing Simmonds to quickly unload small square bales off the back end. Metal panels cover dragline when trailer is loaded with bales.