

European Designed Horse-Drawn Equipment

The Luxembourg non-profit research group Schaff mat Päerd (Working with Horses) designs innovative horse-drawn equipment. They recently announced the Kombi-Roll 2.0, a crumbling and leveling roller for seedbed preparation that uses high tensile steel in its frame. The rear frame is a 2-in. solid round bar that counterbalances the shaft carrier at the front.



**Kombi-Roll
Seedbed Preparation**

“The draft line going through the axle center of the roller minimizes the load on the horse,” says Paul Schmit at Schaff mat Päerd. “Scandinavian-style articulating traction shafts follow the alternating movement of the horse’s shoulders.”

After initial testing, Kombi-Roll 2.2, a triple roller system with a working width of just over 6 ft., was devised for pasture



**Kombi-Roll
Pasture Preparation**

renovation. Later it was also used for seedbed prep. The 2 extra rollers are mounted in a frame that allows them to bracket the original roller and mount to it with a ball-type hitch. This allows the 2 units to flex separately over the terrain with no impact on the horse.

“The technologically advanced rollers result in a price estimate a little over \$2,000 for the single roller and around \$5,000 for the Kombi-Roll 2.2,” says Schmit. “If there is sufficient demand, it will be manufactured in cooperation with the Equi-Idea Company of Verona, Italy. (www.noieilcavallo.org).”

Another new machine is the Kombi-Setz 1.0, a potato planter prototype based on a small planter from the Italian manufacturer Spedo. “It was designed to be used with



**Kombi-Roll
Potato Planter**

small tractors and walk-behind tractors,” says Schmit.

The planter uses the 3-wheel Mono-Rad Concept 1.0 forecart (Vol. 40, No. 1). The single steering wheel and frame of the Mono-Rad attach directly to the 2-wheel planter.

For horse-drawn use, the ground-drive transmission was completely redesigned. The hopper/planting assembly was fitted with a new tubular frame. The changes combined with larger (36-in.) wheels ensure a single horse can provide needed pulling power.

The single pass planter opens the row, places the potatoes at a set spacing, and then closes the row. The wheels with traction tread tires provide sufficient torque to drive the chain conveyer and the chain transmission

system via the freewheel hubs.

The planter, including the Mono-Rad, forecart is 33 in. wide with a length of 104 in. and an empty weight of 487 lbs. The hopper has a capacity of about 2 1/2 cu. ft. The spring-loaded disc hillers have a maximum down pressure of 55 lbs.

“We plan to follow this planter with a 3-row precision vegetable planter,” says Schmit.

A prototype compost spreader is also under



Prototype Compost Spreader

development. Initial field tests were carried out in late October with results to be released in early November.

Contact: FARM SHOW Followup, Schaff mat Päerd, 27, rue de Brouch, L-7481 Tuntange, Luxembourg (schaffmatpaerd@pt.lu; www.schaffmatpaerd.org).