Ephrata Young Farmers install new officers

Ephrata Area Young Farmers will install new officers during the chapter's annual banquet Feb. 1 at the Mt. Airy-Durlach Fire Hall at 6:45 p.m. The officers are, from left, Leonard Martin, treasurer; Mike Pfautz, vice president; Anthony Eberly, president; Richard Bollinger, secretary; and Steve Graybill, public relations director.

New grass hybrid removes sodium from western soil

WASHINGTON – A grass grown for livestock feed also acts as a soil cleanser that could give crops a chance to grow on millions of acres of salt-laden soil in the West, according to a U.S. Department of Agriculture researcher.

Salt, or sodium, that accumulates in soil can stunt crops and seal the soil surface so crops struggle to survive. But a hybrid grass of sorghum and sudangrass may solve that problem.

USDA's Charles W. Robbins said that the grass releases a high level of carbon dioxide in the soil which frees the sodium so rainfall or irrigation water can leach out sodium normally bound up in the soil. The cleansing takes at least two growing seasons.

Robbins, a soil scientist for USDA's Agricultural Research Service, said his studies indicate that the grass could be used to reclaim millions of acres of salt-bound soils in arid western states, parts of the Northern Great Plains, western Canada and similar areas in the world.

"Saline or high-sodium soils limit one's choice of crops," Robbins said. "When sodium builds up because rainfall is absent, there isn't enough rain to flush out the salts, soil collapses, seals up, and becomes impermeable to air and water."

He found that crops having little or no chance of growing in these soils can survive where the grass has been planted. The sorghum-sudangrass hybrid reaches a height of 11 or 12 feet and produces about 25 tons of grass an acre. It is drought resistant and is used for livestock feed and silage in low rainfall areas.

Robbins discovered the grass's cleansing action in studies at the agency's Snake River Conservation Research Center, Kimberly, Idaho, while checking the amount of carbon dioxide released by roots of plants.

To test his finding, Robbins selected a rancher's field with a sodium level so high that no crop of any value could be grown there. For the first planting of the sorghum-sudangrass cross, he said, the field averaged 20 tons of grass an acre—enough for the rancher to harvest and feed to livestock as silage.

The grass also may help cut costs of applying gypsum to reclaim soil, according to Robbins. Farmers in irrigated regions have had to apply 10 to 20 tons of gypsum an acre at $65 to $70 a ton.

"We are getting surprisingly better results by planting the hybrid grass than we got by applying gypsum," he said. Robbins said he will continue laboratory and field tests to determine if planting the grass improves yields of other crops.