TAKING THE WORK OUT OF SOIL SAMPLING

S. L. Vogel, H. L. Kucera, and E. H. Vasey

The NDSU Soils Department began testing soil samples for nitrate nitrogen in 1968. These samples must represent the soil to 24" deep. Sampling from each 1-2 acres is recommended. This means 40-80 sub-samples for an 80 acre field. The sampling may be necessary each year on non-fallow fields because of yearly changes in nutrient levels. This can involve a lot of work!

NDSU Agricultural Engineers have designed an inexpensive soil probe operated by the hydraulic dump box on a farm truck. One man operation is possible. All materials should be available locally. In operation, the dump box is partially raised and the probe attached. As the box is lowered, the probe enters the soil. The probe is withdrawn as the box is again raised.

The end of the probe is the most critical part of this device. The end must be tapered slightly to allow easy removal of the soil sample.

Plans for the probe and correct sampling procedures are available by writing to North Dakota State University, or by contacting your county agent's office.

Vogel is associate professor (Extension), Kucera is associate professor, Department of Agricultural Engineering, and Dr. Vasey is professor (Extension), Department of Soils.



