Notes Section

Powered Auger Aids in Planting Mother Beets

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Transplanting mother beets for seed production is usually necessary in sugarbeet breeding programs. In small seed plots holes may be dug with a spade or shovel, but this work is laborious and slow. We have eliminated much of this hand labor through the use of a small, powered, post-hole auger (Figure 1). These augers can be purchased for about $160.

Figure 1. A typical, small, powered, post-hole auger used for transplanting mother beets.

One man can handily operate the machine in loose, tilled soil and dig a hole 10 inches in diameter and 12 inches deep in about 15 seconds. When the soil is firm or many holes are desired, two men may be needed. Numerous small stones imbedded in firm soil may present a problem. Soil conditions could be assessed by renting a machine for a day.

1 Cooperative investigations of the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture, and the Michigan Agricultural Experiment Station. Approved for publication as Journal article #5501, Michigan Agricultural Experiment Station.

The powerhead on the auger we use has a 3 HP, 2 cycle gasoline engine equipped with a wind-up starter and weighs about 40 pounds. An automatic centrifugal clutch usually prevents the engine from stalling or twisting out-of-hand when the auger hits a solid object in the soil. The soil auger shaft attaches to the powerhead through a rigid torsion spring which absorbs shocks and jars. A 9-inch diameter auger excavates holes big enough for the largest roots and provides a convenient supply of loose soil to repack around the transplanted root. Many other types of plants may be transplanted with a powered auger, especially those that are grown in large pots.