This machine slices beet petioles and similar crop samples rapidly and uniformly...

A Green Plant Sample Slicer

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Fig. 1 The green plant sample slicer

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DURING the growing season many sugar beet peti-

toles, cornstalks, corn leaves and other green crop

samples are required for analyses. These samples

usually are sliced into small uniform pieces. The former

slicing procedure took too much time, did not produce sam-

ples of uniform length, and did not always cut the stringy

portion of the material. There was also the danger of one

sample contaminating the next.

This slicer handles crop samples fast and with uniform

cut. It can be easily cleaned.

The machine is small and lightweight enough to be

easily transported in the laboratory (Fig. 1). It resembles

a small rotary lawn mower except that the sample material

is fed into the top of the machine (Fig. 2). The length of

the sample pieces is controlled by an adjustable gage

mounted under the cutting blade.

The cutter blade revolves in a steel housing at approxi-
mately 950 rpm. A 1/4 hp electric motor is used; power is
transmitted by a V-belt. The sample pieces drop into a shal-
low glass bowl. The cutter assembly can be removed for

cleaning by loosening two thumb screws. This same arrange-
ment adjusts the V-belt tension. Between samples, the cutter
assembly is washed with water and dried by forced air.

This machine has greatly reduced the time required for

preparing green sample materials. The samples are uniform
in length and, because of the ease in cleaning, there is little
danger of sample-to-sample contamination.

Fig. 2 Schematic of the green plant sample slicer