

Harvester for greens may save time, labor

KEARNEYSVILLE, WV - Eating greens may be a special treat, but harvesting them is backbreaking work. So a trio of U.S. Department of Agriculture and State engineers are developing a mechanical harvester to revive a dying industry.

"Fresh market greens are on the decline because they have to be hand-harvested, and workers are difficult to find," says Donald L. Peterson who is with USDA's Agricultural Research Service at Kearneysville, WV.

While stationed at East Lansing, MI, Peterson and two colleagues designed, built and field-tested the first prototype harvester which gathers and cuts the leaves and conveys them through an inspection area where discolored leaves and weeds are removed by hand, then on to a mechanism

which bunches and ties the leaves automatically.

The harvester was rear-mounted to a 60-horsepower tractor that has hydrostatic drive in order to maintain a precise ground speed. Peterson's collaborators were ARS engineer G.K. Brown, located at Michigan State University, and A.K. Srivastava, assistant professor of agricultural engineering at Michigan State University.

The harvester performed well for turnip and mustard greens which had been drill-planted, but did not satisfactorily gather collards which were grown as widely spaced individual plants. It produced bunches that were more uniform in size than hand-harvested greens and equal in quality.

The prototype harvester and its

crew of three turned out 18 cartons (432 bunches) of mustard greens per hour and 28 cartons (672 bunches) of turnip greens per hour-rates that are only slightly better, on a worker-hour basis, than hand-harvesting. However, this test model was designed for single rows. A multiple-row harvester could increase worker productivity, says Peterson. He points out that the engineering involved in converting his prototype into a multiple-row harvester should be relatively simple. Productivity could also be improved by 30 to 50 percent if there is good weed control, and the greens are of more uniform height, he added. Hand-harvesting currently accounts for 10 to 25 percent of the sale price of leafy green vegetables.

Peterson estimates it will be 2 to

3 years before the prototype harvester is ready for commercial use. Brown and Srivastava are continuing its development and are trying to adapt it to a large variety

of leafy greens, including root crops that are sold with their leafy tops, such as beets, bunching onions, turnips and possibly carrots.

\$55 million available to Poland

WASHINGTON — The United States will make \$55 million available to Poland in response to that country's urgent need for corn, Secretary of Agriculture John R. Block said today.

Funds will be provided through an allocation under Title I of Public Law 480 (Food for Peace), and will supplement previous short-term financing made available under the Commodity Credit Corporation's GSM-102 export payment guarantee program. Commodities to be financed under the P.L. 480 allocation will be purchased for

August and September delivery, Block said.

CCC last September allocated \$670 million in credit guarantees to Poland to enable it to obtain commercial financing to buy American agricultural commodities in fiscal 1981. Poland has now used about \$652 million of that allocation.

Title I of Public Law 480 allows receiving nations to buy U.S. agricultural products for dollars, but on credit terms more favorable than normal commercial transactions. The total P.L. 480 financing period for Poland will be 10 years.

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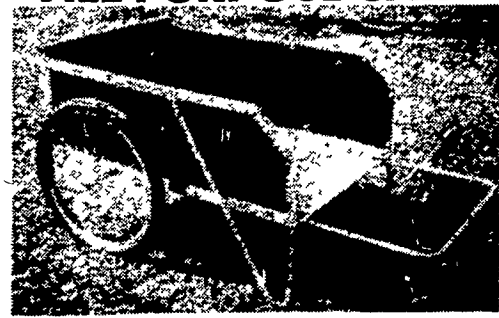
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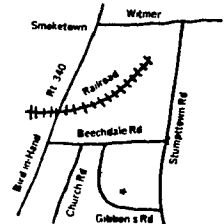
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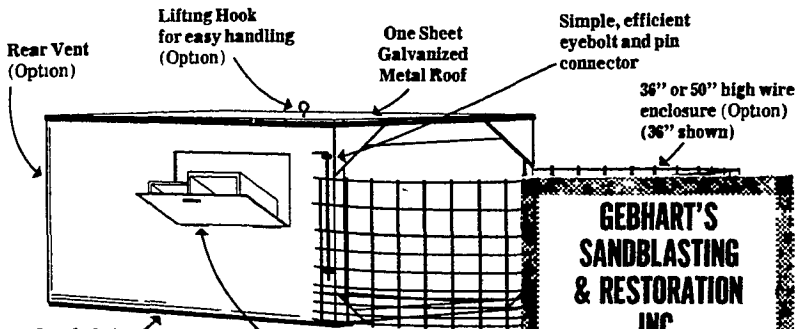
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