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FROM THE MICHIGAN STATE UNIVERSITY

# **DOMINEER** -- A New Greenhouse Lettuce



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COVER: Top row — Larger Domineer leaf lettuce (left); Grand Rapids leaf lettuce (right). Bottom row — Less frill on leaf edge of Domineer (left) when compared to Grand Rapids (right).

#### By Shigemi Honma and S. H. Wittwer<sup>1</sup>

#### INTRODUCTION

The production of greenhouse leaf lettuce in the northern tier of states has been a profitable enterprise for the progressive grower. A superior quality product commands premium prices over the head types in many eastern and midwestern markets.

Leaf lettuce is one of the oldest and more important vegetables grown under glass in Michigan and harvested from October to May. The late spring crop is usually interplanted with tomato. The present variety, Grand Rapids H-54, tends to be "leggy" and light in weight when grown under the higher temperatures of September or May. A variety tolerant to legginess, vigorous and early would be an advantage to the grower. The new leaf variety Domineer, recently released by the Michigan Agricultural Experiment Station offers these advantages.

#### **ORIGIN AND DEVELOPMENT**

Domineer is the result of concentrated effort, started in 1960 to transfer some of the more desirable characteristics such as early maturity and low light tolerance of the English variety Cheshunt 5B to the standard leaf lettuce variety Grand Rapids H-54 (2). Cheshunt 5B was also the parent of Chesibb, a butterhead lettuce (1). Plants were selected for earliness, vigor, tolerance to low light intensity and acceptable leaf characteristics.

#### DESCRIPTION

Domineer is a white seeded leaf lettuce slightly taller than Grand Rapids H-54. The plants are gen-

erally stocky, upright, and vigorous. The leaves are slightly darker green than Grand Rapids but not as dark as Waldmann's green. There is less frill on the leaf edge than Grand Rapids (see cover).

#### PERFORMANCE AND ADAPTABILITY

Domineer has been tested in experimental plots in East Lansing greenhouses and in commercial greenhouses in Grand Rapids, Michigan and Cleveland, Ohio. Although specifically adapted for glass and plastic house forcing, it does well outdoors. Its rapid growth and higher yield in the glasshouse, especially during warm, short fall days and cloudy weather of the winter months, is unexcelled.

Similar results were obtained from plastic house trials during the spring and summer months. The vigorous growth of Domineer is noticeable at germination and continues to market maturity. Maturity is 7 to 10 days earlier than Grand Rapids H-54. Yields of 10 to 15% greater than Grand Rapids have been noted.

#### CULTURAL REQUIREMENTS

The new variety responds favorably to the cultural practices recommended for the Grand Rapids variety. Irrigation, fertilizer and temperature requirements outlined elsewhere should be adequate (2). An 8 x 8 in. plant spacing is recommended since the plants are stockier than the Grand Rapids variety. Domineer matures earlier than the standard Grand Rapids H-54, so the timing of the cropping system may require alteration. The new variety responds to carbon dioxide enrichment in the greenhouse and suggestions outlined elsewhere should be followed to obtain maximum yield and quality (2).

#### LITERATURE CITED

- Honma, Shigemi, and S. H. Wittwer (1969). Chesibb

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<sup>&</sup>lt;sup>1</sup>Professor of Horticulture and Director of the Agricultural Experiment Station, Michigan State University, East Lansing, Michigan 48823, respectively.