

'Odem' Grape

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In a breeding program for table grapes initiated in 1968 at Bet Dagan, one of the objectives has been to breed late-ripening cultivars of *Vitis vinifera*. A late-ripening plant selected from a cross of 'Zeni' and 'Toufahi', made in 1969, is being named 'Odem'.

Origin

'Odem' (hybrid no. 2/71-16) was selected in 1975 from a population of 18 plants resulting from a cross between 'Zeni' and 'Toufahi'. It was propagated as selection no. 110 as ungrafted cuttings in Bet Dagan and as plants grafted to Ruggieri 140 and Chas-selas Berlandieri 41 B at Matityahu farm (elevation 800 m). Six crops, both on own-rooted vines and on grafted plants, have been observed. In addition, 2 crops from a few hundred grafted plants, planted in a farm near Bet Dagan, have been observed.

Description

'Odem' vines are vigorous, well adapted to spur pruning, and prolific. Leaves are of medium size and cordate. Bunches are of large size (averaging 500 g), are fairly loose, and have an elongated shape. Berries are an attractive red at full maturity, ellipsoidal, of large size (averaging 8.0 g). The skin is firm and the fruit is of a pleasant, sweetish flavor.

Ripening date at Bet Dagan is about mid-September (coastal area), and during the first half of October (mountain area). The fruit ripens about 14 days after 'Italia' and 'Dabouki' and close to the date of ripening of 'Flame Tokay'.

At fruit maturity, up to 16° to 18°B and 0.53–0.68% total titratable acidity has been measured. The berry retain firmness well, and bunches remain intact at maturity. Yields of 40–50 MT/ha have been achieved with good management; similar yields have been

obtained in the same environment with 'Dabouki' and 'Barlinka'. No data on performance upon prolonged storage are available.

Availability

A patent is pending. Budwood will be available as soon as tested, virus-free material is released, probably by the end of 1986.

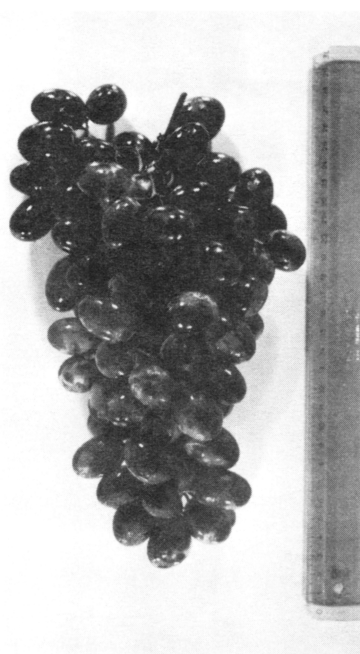


Fig. 1. Fruit cluster of 'Odem' grape.

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Wisconsin 5207G Cucumber Breeding Population

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A greenhouse cucumber (*Cucumis sativus* L.) population, Wisconsin 5207G (WI 5207G), was released in Dec. 1984 by the ARS/USDA and the Univ. of Wisconsin Agricultural Experiment Station. It was made

available to U.S. cucumber breeders to supply a source from which they may extract multiple disease resistant (MDR) lines with fruit and vine characteristics suitable for field and greenhouse production.

Origin

WI 5207G resulted from efforts to combine multiple disease resistance from typical U.S. fresh-market cucumbers with large size and other fruit characteristics observed in 17 accessions obtained in 1977 from the People's Republic of China (PRC). When these PRC accessions became available, we already had on hand MDR lines derived from crosses of large-fruited accessions ('Riesenschall', 'Zeppelin', and Natsufushinari) with a diverse assortment of MDR American fresh-market types, including strains of 'Market-

more' and 'Poinsett'. All of the 17 PRC accessions grown in the greenhouse in Fall 1977 were crossed to these large-fruited MDR lines. The best 8 inbreds at F₄ to F₆ were selected to establish a breeding population. Each had one or 2 of the following 4 PRC accessions in its pedigree: PI 418962, PI 419009, PI 419108, and PI 419135, representing those preferred from the original 17. The 8 inbreds were combined by means of hand pollination into F₁, 4-way crosses and finally into 8-way crosses. Some selection for long fruit was possible in the 4-way crosses. About 200 eight-way plants, grown in a greenhouse ground bed, were randomly intermated by hand pollination, and the longest fruits were selected in each of 3 cycles of mass selection. WI 5207G, now at cycle 4, is still segregating for a range of fruit types and will provide breeders an opportunity to select parent phenotypes that suit their needs.

The original objective was to produce the largest possible fruits as a means of increasing yields of cucumbers for juice and relish-type products. The idea of large-fruited types for juice or relish has not received wide acceptance and WI 5207G probably will be of little interest to processors. This population was released for its potential value in development of breeding material with very long fruits for fresh market.

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Description

Plants are vigorous, branching, indeterminate with large, dark-green leaves, and predominantly gynoeceous sex expression. They bear fruits that are bitter free (*bibi*), coarse to fine, white-spined, with smooth to ridged skin ranging from uniform dark green to light-mottled or striped. Fruit will vary in length from 25 to 56 cm (10 to 22 inches) (Fig. 1). Although a few monoecious plants are present, it is necessary to apply growth regulators such as silver thiosulfate to ensure adequate pollen in a random-mating population or to permit self-pollination of selected plants.

Disease resistance

In greenhouse tests, WI 5207G is uniformly resistant to the following diseases and their causal agents: scab, *Cladosporium cucumerinum* Ell. & Arth.; mosaic, Cucumber Mosaic Virus; powdery mildew, *Sphaerotheca fuliginea* (Schlecht.: Fr.) Poll.; downy mildew, *Pseudoperonospora cubensis* (Berk. & Curt) Rostow; anthracnose, *Colletotrichum orbiculare* (Berk. & Mont.) von Arx; angular leaf spot, *Pseudomonas syringae* pv. *lachrymans* (Smith & Bryan) Young et al.; and fusarium wilt, *Fusarium oxysporum* (Schlecht.) Synd. & Hans f. sp. *cucumerinum* Owen.



Fig. 1. Range of typical fruit of Wisconsin 5207G segregating in greenhouse cycle 4.

Availability

Seed of WI 5207G from a hand-pollinated greenhouse increase may be obtained by ad-

dressing requests to C.E. Peterson, ARS/USDA Dept. of Horticulture, Univ. of Wisconsin, Madison, WI 53706.