

Table 5. Overall visual Papaya Ringspot Virus rating of non-inoculated and inoculated papaya cultivars and selections in south Florida.

Cultivar or selection	Mean PRV rating per non-inoculated plants ^a	Cultivar or selection	Mean PRV rating per inoculated plants ^a
Waikane	4.5a	Eksotica	5.0a
Honey Gold	4.3ab	Saipan Red	5.0a
Higgins	4.1ab	Waikane	5.0a
HCAR-16	4.1ab	Waimanalo	5.0a
Solo-market	4.2abc	Solo-market	5.0a
Coimbatore-2 (HI)	3.9abcd	Higgins	4.9a
TREC-1-S	3.7abcde	Kapoho	4.9a
Coimbatore-5	3.6abcdef	Sunrise	4.9a
Coimbatore-3	3.7abcdef	Sunset	4.9a
PR-665	3.6bcdefg	Criolla	4.5b
Saipan Red	3.6bcdefg	PR-665	4.2c
TREC-1-OP	3.4bcdefg	Coimbatore-2 (HI)	4.2cd
Khag Naun	3.8bcdefg	Coimbatore-3	4.2cd
Waimanalo	3.7bcdefgh	TREC-1-OP	4.0cde
356-3	3.2bcdefgh	HCAR-16	3.9cde
Sweet-tall	3.1cdefgh	Tainung-1	3.9cde
Paco-PR	3.1defgh	Khag Naun	3.9cde
Tainung-5	3.0defgh	TREC-1-S	3.9de
Coimbatore-2	3.1defghi	Cariflora-home	3.9de
Short-sweet	2.9efghi	Honey Gold	3.8e
Kapoho	3.4efghi	Coimbatore-5	3.8e
Washington	2.9efghij	Washington	3.7e
Cariflora-home	2.9fghijk	Coimbatore-2	3.7ef
Cariflora-93	2.8fghijk	Paco-PR	3.5fg
Known-You-1	2.8ghijkl	Short-sweet	3.5g
Criolla	3.2ghijkl	Cariflora-93	3.5gh
Yuen Nong No. 1	2.7ghijklm	Known-You-1	3.3ghi
Tainung-1	2.9hijklmn	Yuen Nong No. 1	3.3ghij
Red Lady	2.7hijklmn	Red Lady	3.3ghijkl
Cariflora	2.7ijklmn	Tainung-5	3.2ghijkl
Cariflora-40-2	2.6ijklmn	Herb	3.2ghijkl
Cariflora-38-10	2.3ijklmno	Sweet-tall	3.2ghijkl
Cariflora-L-94	2.4ijklmno	Cariflora-40-2	3.2hijkl
Cariflora-33-10	2.3klmnop	Cariflora-43-3	3.2hijkl
Herb	2.3klmnop	356-3	3.1ijkl
Sunrise	2.5lmnop	Cariflora-33-10	3.1jkl
Cariflora-37-7	2.2mnop	Cariflora-46-11	3.0klm
Sunset	2.7nop	Cariflora-38-10	3.0lm
Cariflora-46-11	2.1op	Cariflora-37-7	2.9mn
Cariflora-43-3	1.0p	Cariflora-L-94	2.8n
Eksotica	1.8q	Cariflora	2.4o

^aSignificant difference at the 0.05 level according to Duncan's Multiple Range Test.

ra-types appeared to be less affected by PRV than the other cultivars and selections. This may be due to the continuous selection pressure in south Florida for tolerance to endemic strains of this pathogen.

In summary, the height of PRV-inoculated cultivars and selections was less than non-inoculated cultivars and more PRV-tolerant 'Cariflora'-types and Taiwanese cultivars were taller than cultivars tested of Hawaiian origin. In general, more fruit was produced by PRV-infected plants compared to non-inoculated plants. This was unexpected and may be due to PRV infection affecting the balance between vegetative and reproductive growth and/or an evolutionary survival mechanism in reaction to stress. In general, Cariflora-type selections produced more fruit and were less affected by PRV infection than cultivars and selections tested of Hawaiian and Taiwanese origin.

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REPORT OF THE KROME MEMORIAL INSTITUTE VARIETY COMMITTEE

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Abstract. An important contribution of the Florida State Horticultural Society (FSHS) has been its encouragement of the search for superior cultivars of tropical and subtropical fruit grown in Florida. For many years the Variety Committee of the Krome Memorial Institute conducted evaluation and registration of new fruit selections submitted by horticulturists. Selections deemed to have merit were described in the FSHS Proceedings. In recent years the Variety Committee has been inactive, the last report having been published in 1958. At the 1994 annual meeting, members of the Krome Memorial Institute voted to reactivate this committee. Work on a new registry of fruit cultivars was begun in 1995 and will be discussed at the 1995 annual meeting.

The Florida State Horticultural Society (FSHS) has a long and distinguished record of service to the horticultural industries of Florida. A very important contribution has been the evaluation of new selections of the many species of tropical, subtropical and temperate fruit which are grown in the state. This paper describes past activities and present measures to reactivate the Variety Committee of the Krome Memorial Institute.

History

Activities in evaluation and classification of fruit crops are recorded in the FSHS Proceedings from the beginning of the society. Vol. 1 (1888) discusses cooperation between the FSHS, the American Pomological Society, and other state horticultural societies. Vol. 2 (1889) describes exhibits of citrus fruits, rules for judging them, and the awarding of certificates and cash prizes for superior selections. Vols. 5 (1892) through 30 (1917) list the standing committees of the FSHS, including one on plant nomenclature and one on tropical fruits.

In Vol. 8 (1895) a detailed catalog of species and cultivars was published, in which the species were classified in 4 categories: citrus, deciduous, miscellaneous and tropical. This catalog was continued each year through Vol. 20 (1907), and still has value as a historical record of the development of fruit cultivation in Florida. Papers published in subsequent volumes of the Proceedings make it clear that interest in fruit production remained high. In 1933 the Krome Memorial Institute was formed, the first separate section of the FSHS. At first it dealt primarily with tropical fruit, but gradually it was expanded to include work on all fruit species other than citrus. A citrus section formed some years later.

Activities of the Variety Committee

The Krome Memorial Institute included a Variety Committee, which served several purposes. Information was re-

corded on new fruit selections, and a registry of cultivars was maintained. Evaluations of new selections were made, and the information was shared with members of FSHS and other organizations. Superior cultivars were described in detail, sometimes in separate papers and sometimes in reports of the Variety Committee. The reports were published as the need arose.

Eventually interest in the activities of the Variety Committee waned to the point that no new selections were being submitted for evaluation and registration. The most recent report of the committee was published in Vol. 71 (1958) of the Proceedings. Since that time various cultivar descriptions have been published, but there has been no official activity of the Variety Committee.

Discussion

Presently there is a need within the horticultural industry of Florida for a coordinated registry of tropical fruit cultivars. Many individuals and organizations are involved in some way in selection and propagation of new cultivars. There is little coordination of this effort, and often there is confusion about correct names and a lack of accurate information on their characteristics.

The Variety Committee of the Krome Memorial Institute is an appropriate group to coordinate the establishment of a registry of fruit cultivars for Florida. At the 1994 Krome Memorial Institute business meeting this matter was discussed, and those present agreed that the Variety Committee should be reactivated, with the establishment of a fruit cultivar registry as the main objective. Work has begun on this project, and it will be discussed further at the 1995 FSHS annual meeting. This effort will be valuable not only to FSHS members but to horticulturists everywhere. It will be coordinated with the Register of New Fruit and Nut Varieties of the American Society for Horticultural Science.

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SOMATIC EMBRYOGENESIS AND PLANT REGENERATION IN MUSCADINE GRAPE CULTIVAR TRIUMPH

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Abstract. Development of an appropriate in vitro culture and regeneration system is often an important step for micropropagation and gene transformation. Ovules of muscadine grape (*Vitis rotundifolia* Michx.) cultivar 'Triumph' were cultured on Emershad and Ramming (ER) medium. Callus was formed 2-3

weeks after initial culture. Of the ovules cultured, 69.4% produced embryogenic calli. Of these calli, 6.2% produced somatic embryos. Plants were regenerated from the somatic embryos after transfer to Woody Plant (WP) media.

Somatic embryos are often used for micropropagation, synthetic seed technology and molecular studies (Gray and Purohit, 1991; Gray and Meredith, 1992). Grape somatic embryos have been produced from various explant tissues, including anthers (Mauro and Fallot, 1986), zygotic embryos (Gray, 1992; Emershad and Ramming, 1994), ovules (Emershad and Ramming, 1994), leaves and petioles (Cheng and Reisch, 1989; and Robacker, 1993). The most successful somatic embryogenesis system reported in grapes were involved in the bunch grape species *Vitis vinifera* L., *Vitis rupestris*

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