

'NuMex Sunrise', 'NuMex Sunset', and 'NuMex Eclipse' Ornamental Chile Peppers

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The New Mexico Agricultural Experiment Station announces the release of 'NuMex Sunrise', 'NuMex Sunset', and 'NuMex Eclipse', New Mexican-type ornamental chile peppers (*Capsicum annuum* L.). They are unique in providing alternative mature fruit color in chile peppers. Mature fruits of 'NuMex Sunrise', 'NuMex Sunset', and 'NuMex Eclipse' are yellow, orange, and brown, respectively. The main use for these cultivars will be as ornamental chile peppers.

New Mexicans have traditionally harvested and strung mature red chile peppers into colorful strings or ristras. The ristra is hung near the entrance of the house as a symbol of hospitality. Only pepper types that dehydrate sufficiently to eliminate rotting can be used to make ristras (Sais, 1984). Consequently, pepper types like yellow wax, jalapeño, or bell are not suitable for ristras, because they rot before they dry. Decorations, such as wreaths, made with chile peppers that can be dehydrated are popular in the southwestern United States, and are an important tourist product. Ornamental peppers have become increasingly important as an alternative crop for small farmers. 'NuMex Sunrise', 'NuMex Sunset', and 'NuMex Eclipse' were developed upon request of the New Mexico chile pepper producers.

Origin

All three cultivars originated from a cross between 'Permagreen' and 'New Mexico 6-4'. 'Permagreen' produces bell pepper fruits that are green at maturity, and 'New Mexico 6-4' produces long green fruits that are red at maturity. The new cultivars were developed using the pedigree breeding method. Single plant selection was initiated in the F₂ and continued through the F₃. Each F₃ plant selected was homozygous for the horticultural

traits important to the New Mexican pepper cultivar. These traits include plant frame, fruit shape, fruit width, immature fruit color, mature fruit color, fruit length, maturity date, and calyx attachment. One trait, pungency, varies within each cultivar. A single plant for each mature color, i.e., yellow, orange, brown, was selected in the F₃ generation, and bulking procedures were used in the F₆ generation to increase seed for dis-

tribution. No selection pressure was applied after bulking procedures were initiated. The F₃ through F₅ were grown in an insect-proof greenhouse, whereas the bulked F₆ was increased under insect-proof screened isolation cages in the field.

Description

Each of the lines is green when immature, turning its respective color at maturity. 'NuMex Sunrise', 'NuMex Sunset', and 'NuMex Eclipse' are yellow, orange, and brown at maturity, respectively (Fig. 1). The pods are long, with rounded shoulders, pointed tip, smooth skin, and an attached calyx. They are mildly pungent like 'New Mexico 6-4' and have the typical chile pepper flavor. In Table 1 the mean values for various criteria used in evaluating the progenies are reported. Leaves are sufficiently dense on the plant frame to prevent solar injury to the pods.

Availability

Small trial samples of open-pollinated seed

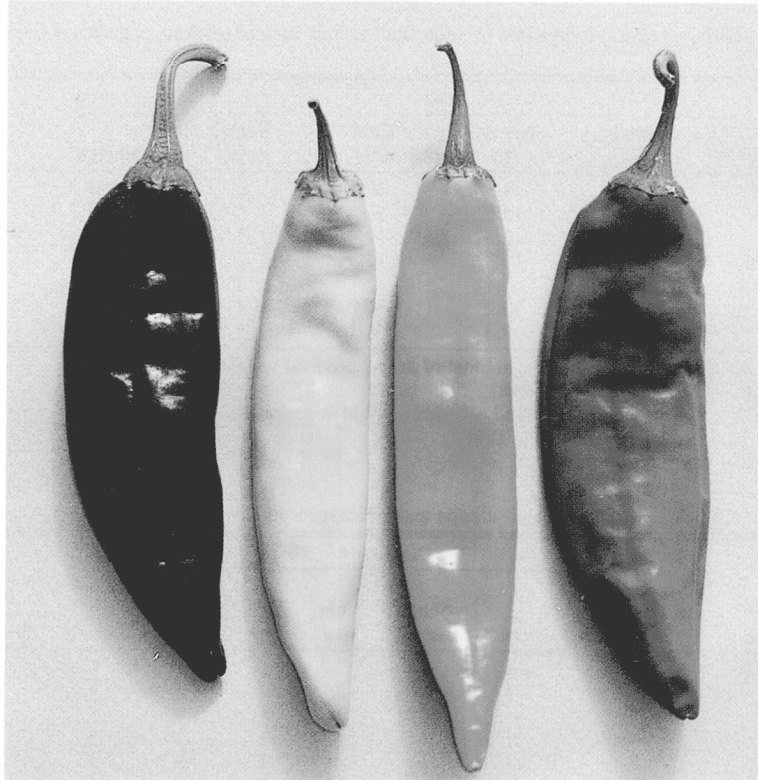


Fig. 1. Mature fruits of 'NuMex Eclipse', 'NuMex Sunrise', 'NuMex Sunset', and 'NuMex R Naky'.

Table 1. Plant and fruit characteristics of New Mexican-type chile pepper cultivars at Las Cruces, N. M.¹

Cultivar	Plant		Fruit		
	Height (cm)	Width (cm)	Length (cm)	Width (cm)	Size (g)
NuMex Sunrise	70 c ²	60 a	18 ab	3.7 c	50 b
NuMex Eclipse	85 b	50 b	13 c	4.9 a	55 b
NuMex Sunset	95 a	60 a	19 a	3.6 c	50 b
NuMex R Naky	75 c	65 a	17 b	4.4 b	70 a
New Mexico 6-4	75 c	65 a	17 b	4.3 b	69a

¹Means represent 10 plants or 25 fruits sampled in each of five replications each year for three years.

²Mean separation in columns by a protected Fisher's LSD test, 0.05 level.

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are available for distribution to interested research and extension personnel. Address trial requests for seed to the senior author. Commercial distribution of foundation seed will

be through the New Mexico Crop Improvement Assn., New Mexico State Univ., Box 3CI, Las Cruces, NM 88003; phone 505/

Literature Cited

Sais, J.R. 1984. Making chile ristras. New Mexico State Univ. Coop. Ext. Bul. 400 H-2.
