

The kernel, like the nut, is slightly longer than its average width and also tends to have the blocky shape (Fig. 1). The pellicle is patterned with small ridges, but these do not detract from kernel appearance. There is little tendency for the kernel to shrivel and it presents a clean appearance since very little of the inner ovary wall adheres to it. These factors give the kernel a smooth, uniform and attractive appearance. Kernel cavity is of medium size. Percentage of kernel by weight of sound nuts ranges from 45 to 47%. Blanks range from 16 to 20%

which is considerably higher than desirable. Flavor of the raw nut is good, and it is enhanced by roasting. Pellicle removal following dry roasting is much less than with Barcelona.

#### AVAILABILITY OF TREES

Nurserymen have limited supplies of Butler trees available for sale. Since it is being introduced as a pollinizer, only one tree will be needed for every 16 or 17 trees of the main crop cultivar. Neither the Oregon Agricultural Experiment Station nor the USDA produces trees for sale.

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## New Spur Type McIntosh Introduced by Stark Bro's

JERRY FRECON<sup>1</sup>

Starkspur® UltraMac has been introduced by Stark Bro's Nurseries and Orchards Company. The new variety has been selected and developed because of its complete bright red fruit and compact spur type growth habit.

Starkspur UltraMac originated in 1968 as a whole tree mutation of Summerland Red McIntosh in the Mac F. Dewar Orchard near Oyama, British Columbia, Canada. The variety was noted and selected because it not only produced an apple superior in color to Summerland Red McIntosh, but also on a tree with erect and compact growth, and fruit borne abundantly on spurs.

Budwood was collected and trees propagated for testing and evaluation at the Canadian Department of Agriculture Research Station in Summerland, British Columbia. Through 8 years of study detailed observations were made and data collected on its fruit and tree characteristics in comparison to other prominent spur type

McIntosh originating in British Columbia. While most spur types had similar fruit characteristics superior in color but identical to Summerland Red McIntosh, there were definite differences recorded in degree of spur development.

Starkspur UltraMac will complement Starkspur McIntosh (Gatzke cultivar) because it develops more spurs and is more compact than Starkspur McIntosh. It will be offered because the tree will be smaller in size at maturity on all rootstocks than Starkspur McIntosh.

Starkspur UltraMac was imported in 1977 by Stark Bro's and propagated for testing in the United States. Trees have been established across the country for further evaluation.

U. S. Plant Patent No. 4383 has been issued for Starkspur UltraMac. The variety is being distributed exclusively by Stark Bro's. Trees will be available for sales and distribution in the Fall of 1981 and Spring of 1982.

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