Fruit Varieties Journal 50(1):2-5 1996

'Sumner' Pecan

DARRELL SPARKS[1]

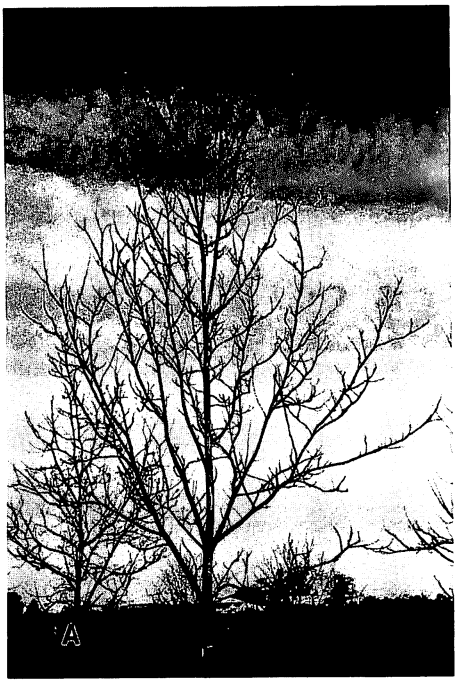
The horticultural value of this cultivar was recognized around 1932 by Walter E. Sumner, Tift County Ga. (5). Eight years later, in 1940, 'Sumner' was included in the cultivar collection on the Coastal Plain Experiment Station, Tifton, Ga. (12). Near the same time, 'Sumner' was commercially propagated by D. A. Law, Chula, Ga. and by Fred Voigt, Waycross, Ga. Voigt top worked several trees to 'Sumner' and later propagated the cultivar in his nursery. Commercial planting was limited until Mr. Voigt sold 'Sumner' trees to Patten Seed Company, Lakeland, Ga. in the late 1960's. Patten Seed Company established a pecan nursery with 'Sumner' as one of their major cultivars in 1977 and has been the major promoter of 'Sumner' since that time. Initially, 'Sumner' was planted primarily in the southeastern part of the state of Georgia; but now 'Sumner' is rapidly becoming a popular cultivar throughout the pecan producing region of Georgia.



The location of the original 'Sumner' tree was lost with time but was rediscovered by T. F. Crocker, D. Sparks, and I. E. Yates in 1993. The tree (Fig. 1) is among other pecan trees on the lawn of Phyllis S. Nicholson at the corner of 16th Street and Central Avenue, Tifton, Ga. Most trees in the lawn have been topworked to 'Sumner' indicating that a previous owner of the property recognized the value of this cultivar. One of the previous owners of the property was Thomas Daniel Smith who planted nuts on the property in about 1905 according to his great granddaughter, Nellie Chapman Davis (personal communication, 1993). At least four seedlings came from this planting, two of which became the named cultivars, 'Big Z' and 'Sumner.' Many similarities between 'Sumner' and 'Schley' indicate that 'Sumner' may be a seedling of 'Schley.' Characteristics in common to the two cultivars include similar leaf form, oblong nut shape, consistent yearly nut production, and susceptibility to black pecan aphids.

Date of budbreak is similar to 'Stuart' (9). Foliage is dark green and glossy. Foliage retention in the fall is excellent (7). Unlike most cultivars, mature trees of 'Sumner' rarely have a second cycle of shoot growth. Tree form is moderately upright (Fig. 2) and, as a result, 'Sumner' is more suited to high density planting than spreading cultivars such

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as 'Farley' and 'Desirable.' The tree develops strong crotches, requires very little training, and is resistant to breakage. The canopy is moderately open. Unlike 'Schley,' the bark of 'Sumner' is non-scaly (Fig. 3).

'Sumner' is protogynous. 'Sumner,' like 'Stuart,' is a good late-season pollinizer. 'Desirable' will pollinate 'Sumner' in Georgia (12).

'Sumner' is precocious and prolific (9). Fruit is borne on both short and long shoots from branches along the length of pole-like branches. Annual observations of mature trees in the Voigt orchard indicate alternate bearing is relatively minor compared to most cultivars and especially so for a prolific cultivar. The relatively consistent production is due in part to 'Sumner's' moderate second drop.

The shuck is thin (3), smooth, glossy, and has a distinguishing crease at the apex (Fig. 4). Date of nut maturity is very late, about 11 days after 'Stuart' (9). The late nut maturity is a major disadvantage.





Figure 3. The non-scaly bark of 'Sumner.'

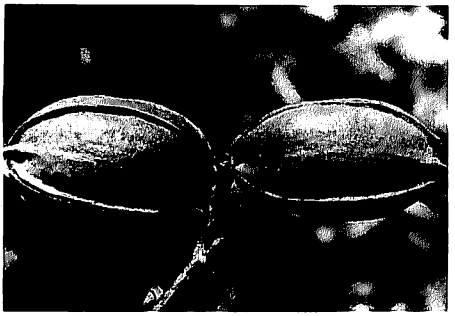


Figure 4. Fruit of 'Sumner' pecan. The shuck is smooth and glossy with a distinguishing crease at the apex.

Nut shape is oblong. The predominant base shape is obtuse, but base shape is variable and can vary to round and obtuse asymmetric. Apex shape is predominantly cuspidate, but can be cuspidate asymmetric. The apex is grooved along the sutures. Shell halves within a nut are usually equal. When shell halves are unequal, the smaller half is very much reduced and in addition, is compressed in midsection. The overall appearance of these asymmetric nuts is boat-shaped with the larger half forming the boat's bottom and sides. When the nut is symmetric, nut cross section shape is round to slightly oval. The shell suture is elevated. Ridges are evident. Shell surface topography is smooth. The shell is dull light brown with black markings. Both stripes and dots are moderate (9).

Nut shape is somewhat similar to 'Schley,' but, in contrast to 'Schley,' the nut is large at about 48 nuts per pound. On occasion, 'Sumner' nuts have been sold as "Jumbo Schley." The shell is thicker than 'Schley.' Percentage kernel is about 54. The nut continues to fill well as a mature tree. Kernel stability, unlike 'Schley,' is good. Color is acceptable with a color rating of 6.5 (1 = dark; 10 = light), but the kernel is darker in some years than in others. In addition, when left on the tree, the kernel darkens rapidly. Darkening can be minimized by early harvest (shortly after the shuck dehisces). However, when the wet nut is dried, color is sometimes uneven, in that part of the kernel is lighter than the remainder of the kernel. Although marginal kernel quality is often cited as a disadvantage, the criticism does not appear to be valid as the kernel sells well in the shelled trade. The kernel has deep, narrow dorsal grooves which makes removal of the packing tissue somewhat difficult. In addition, the kernel has a tendency to chip during the cracking process. Regardless, the nut brings a premium price in the inshell trade. However, the narrow grooves increase processing costs and, for this reason, the nut is sometimes downgraded by the processor (9), especially in years when the national pecan production is high.

'Sumner' has good resistance or immunity to scab (8). During the excessively wet growing season of 1991, 'Sumner' was immune to scab in some locations in Georgia, but, mild scab has been observed on 'Sumner' in other locations. As in 'Schley,' 'Sumner' foliage is especially susceptible to early season black pecan aphids infestations which is also a problem in late season. The leaf has moderate resistance to sooty mold accumulation (9). 'Sumner' is medium in susceptibility to hickory shuckworm (3) and nut curculio, but has above resistance to pecan bud moth (6). At Brownwood, Tex., the leaf is immune to southern pecan leaf phylloxera (1) and has high resistance to pecan phylloxera (2). The fruit is highly susceptible to damage from stink bug. 'Sumner' nursery trees are very susceptible to both winter (11) and to early fall freezes (4). Freeze damage can be greatly minimized by propagation to a seedling (juvenile) trunk (10). In some seasons, poor shuck opening and premature germination of nuts on the tree can be a problem. 'Sumner' fruits are subject to splitting during the water stage of development. The split is due to excessive internal

pressure that occurs with high humidity and soil moisture as in 'Wichita' (9). 'Sumner' is easy to propagate.

Scab immunity or high resistance, good nut size with a well developed kernel, heavy nut production at a young tree age, and the tendency to produce relatively consistently on an annual basis have made 'Sumner' a popular cultivar for new plantings by many growers in Georgia. The popularity of this cultivar has increased rapidly in spite of late nut maturity and less than desirable cracking ability.

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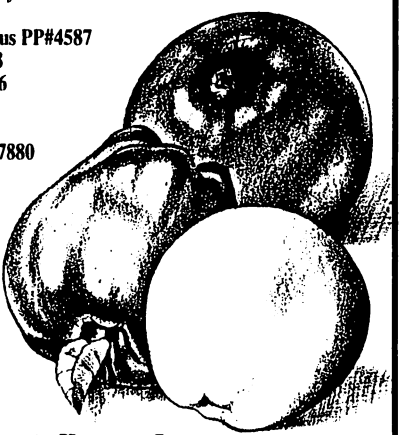
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