

Literature Cited

- Dhatt, A. S. and R. P. S. Gill. 1976. Prospects of almond cultivation in Punjab. *Prog. Fmg.* 12:142.
- Dhaliwal, G. S.; J. S. Jawanda and D. K. Uppal. 1978. Studies on physico-chemical characters of almonds. *Pb. Hort. J.* 18(1 & 2):72-77.
- Jawanda, J. S.; A. S. Dhatt, and R. P. S. Gill. 1977. Evolution of almond cultivars suitable for cultivation in the Plains of Punjab. *Ann. Rep. Dept. Horticulture P.A.U. Ludhiana for 1976-77.* pp. 210-217.
- Jawanda, J. S. 1978. Almond growing in Kashmir *Pb. Hort. J.* 18(1 & 2):14-17.
- Kester, D. E. and R. Asay. 1975. Advance in fruit breeding. *Purdue Univ. Press.* pp. 387-414.
- Singh, K. K.; J. C. Bakhsi, and A. S. Narang. 1969. Prospect of almond cultivation in Punjab. *Pb. Hort. J.* 9(3 & 4):103-108.
- Thapar, A. R. 1960. Horticulture in Hill Region of North India. Directorate of Extension, Ministry of Food and Agriculture, New Delhi.

Student Paper presented for 1983 U.P. Hedrick Award:

Black Ben Davis or Guno: A Question of Right, Truth and Justice³

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For two years at the turn of the century, a vehement argument raged across the Arkansas-Missouri border over the nomenclature of an apple. This battle called the "Gano-Black Ben Davis controversy," embroiled one of the country's largest nurseries (Stark Bros.) and the horticultural societies of what was then two of the nation's most important apple-producing states, Arkansas and Missouri. Profit, pride and patriotism were probably the motive forces behind the separate factions. The framework of the controversy was this: Arkansans contended that these were two distinct cultivars, while most of the Missourians claimed the two were the same. They also claimed "the right to name" based on the older and more-or-less traceable history of the Gano.

Although fought with only pens and tongues, the rhetoric at times was fierce; neither authority nor rules ever decisively concluded this war of

words. To fully understand the debate, a little background is necessary.

In 1848 the American Pomological Society (APS) was formed, and, as one of its early actions, it adopted a code of nomenclature. Johnson (1949) listed the formulated code of nomenclature as one of the Society's major accomplishments in its first 100 years. Prior to that, no standardized rules of pomological nomenclature existed in the U.S. Naming was done haphazardly and arbitrarily, often without regard for origin, introducer, or even fruit characteristics. Theoretically, this code should have solved most subsequent nomenclature problems, but, as Zielinski (1955) claimed, "It is probably safe to say that not more than one fruit grower out of every thousand has ever seen it."

It was not uncommon for a cultivar to have more than one name, or for more than one cultivar to share the same name. Beach (1905) lists Ortle

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with 31 synonyms. But what made the Gano-Black Ben Davis controversy remarkable was the fervor of the fight.

The question had been politely discussed for several years before the rhetoric become impassioned. In a University of Arkansas bulletin by Professor J. T. Stinson (1899) both were indicated to be the same apple. This designation apparently failed to arouse anyone's interest or ire. The real trouble began in 1903. At the summer meeting of the Missouri Horticultural Society in 1902, a committee was established to investigate the question (Goodman 1902). The Missouri committee's work focused primarily on the examination of leaf, wood and fruit characteristics. The committee consisting of J. C. Whitten, J. C. Evans and W. T. Flournoy also visited the site of the original Black Ben Davis in Arkansas and assembled information on the origin of both Gano and Black Ben Davis. Based on their findings and the opinions of USDA pomologists, the committee concluded that, . . . "the two apples are one and the same variety; and that their having been regarded locally as being different sorts is only another case where isolated trees of a variety, having been brought to notice in somewhat widely separated neighborhoods, have each for a time been honestly regarded as being distinct seedling origin" (Whitten, et al., 1904). The report of the committee was accepted unanimously by the Missouri Society without discussion or hoopla, on December 10, 1903.

At the afternoon session of the Arkansas Horticulture Society on January 12, 1904, Mr. W. Vincenheller, having heard of the Missouri committee's report, moved that a committee of three be appointed to investigate the Gano-Black Ben Davis controversy

(Walker, 1904). In the discussion he appealed for "a decision of the highest horticulture society in the land, The American Pomological Society, and further exhorted, I am not in favor of letting Missouri name our apples (applause). This is not a question of patriotism; it is a question of right, truth and justice . . ."

On the morning of Jan. 14, 1904, W. Vincenheller, A. W. Poole, and J. E. R. Reynolds, who comprised the Arkansas committee, made their report. It included a complete abstract of the Alexander Black farm, which took up 16 pages of the proceedings. Vincenheller orated, "I honor the man that owns the ground for whom the Gano in Missouri has been named; but what I ask you here today is to render unto Arkansas the things that belong to Arkansas" (tremendous applause) (Walker, 1904).

The report was adopted on the spot without the committee or the society as a whole ever considering actual plant material from the trees in question.

In Missouri, the fight continued in earnest into 1904 but with Stark Bros. and certain members of the Missouri's Horticultural Society as the antagonists in the ring.

Obviously dismayed by the findings of the Missouri committee, E. W. Stark at the 1904 Missouri Horticultural Society meeting charged, "As far as the personnel of the committee for the investigation is concerned, Mr. Goodman (L. A. Goodman, Secretary of the Society) is at the bottom of the whole, and responsible for it . . . Mr. Goodman is the instigator, he never lost an opportunity to say the apples were the same, never said a word in favor, never recommended a customer to Stark Bros. He said Stark's imposition should be settled by the Society.

In conclusion we want the members to know what led to the controversy, and the expense. We mean to publish the whole matter" (Goodman, 1904).

It was indeed Goodman who made the original motion that established the committee to investigate the matter, but whether he did so to impugn the reputation of Stark Bros., as E. W. Stark seemed to imply, remains a moot point.

At the January 1904 meeting, E. W. Stark also made some allegations of misuse of Society funds by Goodman that were apparently unfounded and probably prompted by his disgruntlement over the committee's findings.

Prior to this 1904 meeting, the Starks were busy bringing pressure to bear on certain Society members to water down or nullify the Gano-Black Ben Davis report, but in the end, their browbeating backfired. W. P. Stark had prepared a statement meant for signing by the Society's executive board (the full statement does not appear in the annual report, and so its content can only be inferred). The executive committee refused to sign it. One member, G. T. Tippin, a Vice President, elaborated, "I am of the men who would not sign the statement Mr. Stark wanted, and my brother officers are glad we refused to do so . . . The report was made in the interest of fruit growers and is an honest decision. The Society or the executive committee are not responsible if the report is misused."

After 1904 the emotional fervor seems to have subsided, but two questions remained. Why was this particular nomenclature controversy so intense, and who was right?

As for the behavior of the Stark brothers, they apparently had some money and, perhaps, their reputations at stake, (They listed Black Ben Davis in their catalogue). As for the Mis-

souri Society, they stayed relatively composed until pushed by the Starks. The zeal of the Arkansas faction is the hardest to explain. It seems most likely that jingoism, despite Mr. Vincenheller's statement to the contrary, fired the emotions of the Arkansans. The two states were on different sides of the Civil War, and animosity lingered between the two as some of the folktales collected by Vance Randolph (1958) can attest to. "They call Missouri the 'Puke Territory,'" Randolph transcribed, "and make out like the people in Missouri are no better than Yankees."

The second question is more difficult to address. It is a shame that the original Black Ben Davis tree was cut down before the Missouri committee could get to it. Today no one can be sure if a tree claimed to be Black Ben Davis or Gano was in fact propagated from the respective parent tree. If one could be reasonably certain as to the pure lineage of Black Ben Davis and Gano trees, chemical analysis (Vinterhalter and James 1983, Mielke and Wolfe 1982, and Carter and Black 1980) might be able to settle the question. However, both could have occurred by chance.

Zielinski (1955) had indicated that there are two conventional methods of settling nomenclature disputes. The first is by some code of rules, and the second, by authority. Because the source of the two original trees could not be indubitably proved to everyone's satisfaction, the APS code of nomenclature does not seem applicable (although it looks as though the name Gano was in print first). (APS guidelines for nomenclature have been in existence for over 100 years. They have been heeded by some, but perhaps greater compliance could be achieved if the APS brought these guidelines once again to the attention of breeders and nurserymen.)

As for the second method, it has been quite some time since a prominent pomologist existed in the US who was so revered and respected that he could be considered an indisputable authority. L. H. Bailey and S. A. Beach were, in their day, such personages. Bailey (1910) and Beach (1905) both mentioned these apples as separate varieties, but the former's original manuscript was prepared in 1900 and the latter's in 1903, thus both reports were prior to the Missouri report being made public and before the "heat of the battle." Bailey reedited his monumental work in 1928 without acknowledging the controversy, and thus retained them as separate cultivars.

If there was any other man who held such intellectual sway over his fellows in pomology that he could be considered an arbiter and authority in such matters, it was U. P. Hedrick. Fortunately, Hedrick (1922) did address this problem, and his words provide a diplomatic and appropriate conclusion to this belated investigation.

"Despite the fact that the evidence seems to show that they are of distinct origin," Hedrick wrote, "Black Ben Davis and Gano may be considered identical."

Literature Cited

1. Bailey, L. H. 1910. *Cyclopedia of American Horticulture*. Macmillan Co., London. 2016 pp.
2. Beach, S. A. 1905. *The Apples Of New York*. Volume I. J. B. Lyon Co., Albany, N.Y. 409 pp.
3. Carter, E. C., Jr. and M. M. Black. 1930. Identification of peach cultivars through protein analysis. *HortScience* 15(3):292-293.
4. Goodman, L. A., (ed.). 1902. From the minutes of the 45th Annual Report of the State Horticultural Society of Missouri. p. 88.
5. Goodman, L. A., (ed.). 1904. From the minutes of the 47th Annual Report of the Horticultural Society of Missouri. pp. 39-43.
6. Hedrick, U. P. 1922. *Cyclopedia of Hardy Fruits*. Macmillan Co., N.Y. 370 pp.
7. Johnson, S. (ed.). 1949. *Proceedings of the American Pomological Society*. 64:157-159.
8. Mielke, E. A. and W. H. Wolfe. 1982. Identification of pecan cultivars with pollen isoenzymes. *HortScience* 17(3):382-383.
9. Randolph, V. 1958. *Sticks In The Knapsack*. Columbia Univ. Press, N.Y. 171 pp.
10. Stinson, J. T. 1899. Second report on Arkansas seedling apples. *Ark. Agr. Exp. Sta. Bull.* 60.
11. Vinterhalter, D. V. and D. J. James. 1983. The use of peroxidase polymorphism in the identification of apple scion cultivars. *Scientia Horticulturae* 18(3):253-261.
12. Walker, E., (ed.). 1904. *Proceedings of the 24th Arkansas State Horticultural Society*. 24:133-124.
13. Whitten, J. C., J. C. Evans and W. T. Flournoy. 1904. The decision of the committee. In L. A. Goodman, (ed.). 47th Annual Report of the State Horticultural Society of Missouri. p. 104.
14. Zielinski, Q. B. 1955. *Modern Systematic Pomology*. William L. Brown Co., Dubuque, Iowa. 296 pp.

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