Some Observations of Howard 17 (Premier) and Vermilion Strawberries

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Substantially virus-free plants of Howard 17 (Premier)** and Vermilion strawberries were planted in the spring of 1955 at the experimental farm of the University of Illinois at Urbana, mainly to determine the response of the two varieties to supplemental irrigation. Detailed records were obtained for the years 1956 and 1957 on total yield, harvest periods, weight per berry, total number of berries per harvest, soluble solids and pH of the juice for each variety.

The purpose of this study was not only to supplement previous findings pertaining to moisture supply and strawberry growth, but also to supply additional information on the two varieties Howard Premier and Vermilion. The major portion of this study will be published elsewhere, but some of the observations should be of interest to those growers who are concerned with the performance of these two varieties.

There was a greater yield in the 1956 harvest for both varieties in those plots where supplemental irrigation had been applied during the previous growing season. However, Vermilion yields were greater for this season, although not significantly so. In 1957, the yield from Vermilion were significantly greater than that of Howard Premier in the irrigated plots.

The average berry size was larger in Vermilion than in Howard Premier, and records for 1957 show that Vermilion maintained better berry size throughout the harvest season. Fewer berries were noted for Vermilion as compared with Howard Premier, but larger berries resulted in a greater yield for Vermilion.

During the first three pickings of each year the fruit of Howard Premier was abnormal in size and shape. Indentations were present on the primary berries, and many were split through nearly to the calyx (Fig. 1). The resulting appearance and storage life were undesirable from a market standpoint. Short storage life of Howard Premier fruit was noted in all pickings in spite of the reasonably careful handling. Since no cultural

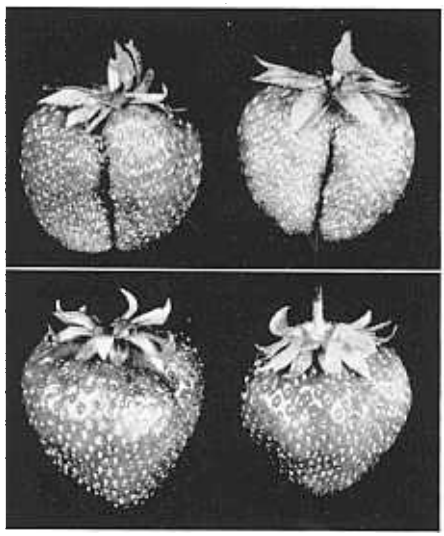

Fig. 1. **Howard Premier strawberries (above) showing the splitting of the fruit. Vermilion fruit (below) shows normal berry development.**

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**This variety will be referred to in the remainder of this article as Howard Premier.

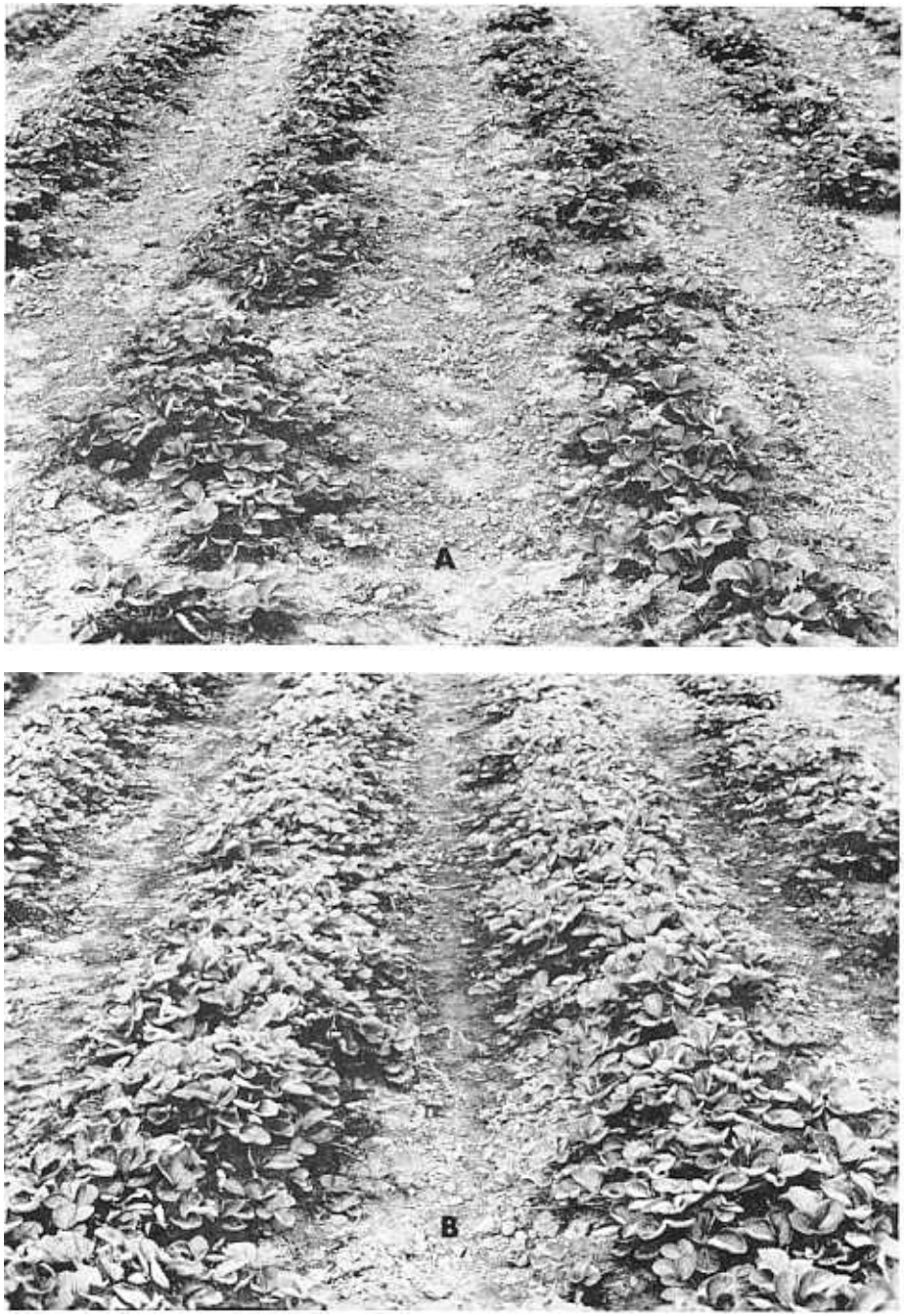

Fig. 2. **Vermilion strawberry plants on September 1, 1957, following harvest and renovation, showing (A) plots that had received no supplemental irrigation; and (B) plots that had received supplemental irrigation.**

treatment affected this disorder, it was probably caused by some genetic factor in the variety.

Vermilion produced well-formed berries throughout the harvest season for both 1956 and 1957 (Fig. 1). The fruit was medium to large, very attractive in appearance and had good consumer acceptance.

Differences in runner production was noted between the two varieties. Both produced abundant runner growth in the irrigated plots. However, when drought occurred during the time of runner formation, Vermilion plants failed to set runners when grown without irrigation. The plants appeared to be in a non-vegetative state (Fig. 2A). However, in the plots receiving an abundant supply of soil moisture, Vermilion plants were vigorous and runner development was good (Fig. 2B).

Fruits in Alberta, Canada

Mr. A. L. Young, cattle farmer and amateur horticulturist from Brooks, Alberta, Canada, makes the following comments about his experiences with fruits:

"About plums, while we always have a few wild selections around, a few of the better plums fruit about as often as the wild ones. The Fiebing from Minnesota is a grand plum as are Underwood and Fenville from Ottawa. I have been using seed from Alderman's (Univ. of Minnesota) seedling No. 89 for rootstocks, and a lot of these produce fair fruit, in the wild class.

"We can't do much with tree cherries, although I have had some success with Cerese and Besserabian. A few cherry-plums like Opato and Sapo do fairly well at times.

"The apples we grow are mostly my own selections, Pioneer numbered stuff. We keep trying everything from everywhere, and once in a while we get a little nice fruit.

"I have tried everything in pears with little luck except for my Pioneer seedlings. No. 2 was good but blighted. No. 1 is too small and gritty. No. 3 is also small. Possibly the best we have is No. 4, which is larger and has really nice flavor. Wild pears are awful for blight, so I use Pioneer seed for rootstocks."