IMPACT OF RECORDED MENDELIAN FACTORS ON THE TOMATO, 1929-59

Step by Step the Changes Caused by the Transfer of Recorded Genetic Factors are Traced in Chart Form

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The chart printed on the following pages cannot trace the parentage of all the varieties placed on the market over the past thirty years as, for this purpose, too many have been introduced. Under the circumstances this brings up the problem as to what varieties should be charted? Here one is inclined to trace varieties with which he is familiar and leave out important types with which he has had little or no contact. As a result the chart as presented is inadequate for certain purposes but it does illustrate how difficult future introductions will be to trace and untangle.

It would be an aid toward coping with a complex situation if, from now on, the Reports of the Tomato Genetics Co-operative gave brief mention to each new introduction. It would be a mistake to make this description the official one. The description in the Reports of the Tomato Genetics Co-operative should be far too brief for this purpose. All that is needed is to place the description under a brief formula as will be seen in the graph for such varieties as Pearson LV6.

Also, numbers in a pedigree should be reported and traced back to a recognized base. For example, in the chart, the Harrow variety is described as S-25-7-2 x Red Cloud. Such numbers as S-25-7-2 have value to the plant breeder working with them but are meaningless to one who has seen them for the first time in print. The number S-25-7-2 has meaning, as will be seen in the chart, when it is anchored back to the varieties Cherry, Rutgers, and Gulf State Market. As a further example of the same problem the variety Hotset is S1114 x 179. If such a cross was placed, without further explanation, in the Report of the Tomato Genetics Co-operative it would be understood by only a few. Such numbering, when reported, should be traced back in the Report to a universally recognized source.

Now is the logical time to channel the scattered work of describing new varieties and hybrids toward one focal point. If we continue as we are the task of retracing our steps will be difficult. As a group we could tend to lose track of our work. This would be a grave mistake. We will have to make up our minds soon as to which road we wish to take.

This chart has been mostly built up through correspondence with the following workers: C. F. Andrus, L. Butler, E. W. Chipman, G. C. Hanna, W. A. Huelsen, E. A. Kerr, E. P. Lana, L. H. Lyall, L. F. Ounsworth, R. D. Peel, C. M. Rick, T. Udsen, J. O. Vandal, C. Walkof, A. F. Yeager, P. A. Young.

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