The accepted procedure for the field production of corn hybrids, since their successful introduction more than a quarter of a century ago, has been to remove by hand the tassels from one parent in order to insure pollination by the other parent. This detasseling of the seed-parent rows has always confronted the seed grower with one of his most expensive and painstaking operations in the production of corn hybrids. Although detasseling costs vary each year as a result of weather conditions, this operation may ordinarily be expected to cost from $10 to $20 per acre. Any method which could be devised to obviate detasseling would result in a considerable saving to the grower and consequently should lower the cost involved in the production of hybrid seed corn.

The most promising method yet suggested as a means of producing corn hybrids without detasseling is through the utilization of cytoplasmic male-sterile inbreds. Jones and Everett (3) have described in a general manner the procedure for this method. Briefly, this involves the transfer of a cytoplasmic character to the desired inbred lines. These, of course, are single crosses which are used as the maternal parent of the seed parent of a double cross, and also lines in which the male-sterile character remains stable. In order to insure a normal grain crop, it would be necessary to mix seed from male-sterile single crosses with that seed produced from normal single crosses. Another possible alternative is to develop a pollinator which is capable of restoring fertility when crossed with male-sterile progenies. Jones and Clarke (4) have reported the development of a similar method in onions through the use of cytoplasmic male-sterile lines, whereby hybrid onions are now being produced successfully on a commercial scale.