GRAIN quality of oats has always been of interest to the farmer, feeder, and the industrial user. Various indicators of quality have been employed by both the miller and seedsmen. The most used of several quality criteria have been groat percentage, bushel weight, percentage of doubles, kernel shape, and kernel weight. There has not been agreement among workers as to the relative importance of any one of these factors except for groat percentage for the miller.

Large plump kernels are important to the miller, since small and thin kernels are not valuable for milling. Kernel weight, though considered by some to be the most accurate criterion of quality, has been discounted by others. Bushel weight though controversial has been the most universally used.

 Breeders have been concerned with devising methods, whereby high quality lines may be isolated and stabilized as soon as possible after hybridization. Unselected families derived from individual F$_2$ plant and selected lines when grown in the same year might indicate the degree of genetic advance that could be made through selection, and the time most effective for selection. Stability and performance could be examined more closely by growing several generations in the same year and by growing the same generation more than one year. Heritability and breeding behavior of quality factors need more attention.

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3 A double kernel is one in which the lemma of the primary kernel either partially or wholly envelops the secondary kernel.