PLANT breeders and geneticists have long felt the need of standardizing the system of genetic nomenclature and symbols for the various crops. In order to adhere to a uniform type of nomenclature and symbols, the method of assigning symbols used by the maize geneticists and summarized by Emerson, et al. (12) have been used as a basis.

In general, characters are given a name suggestive of one of their chief attributes. The symbol consists of the initial letter of the name of the character or of the initial letter with some other appropriate letter in the name. Allelomorphic series of genes have a common basic symbol and are differentiated by superscript letters. Phenotypically similar characters are usually given the same name and differentiated by subscript numerals or letters.

In order to standardize the use of names and symbols, it would appear that, prior to publication, the name and symbol intended for use conform with the general principles given above and the list given in the following pages.

GENETIC FACTORS

In Table 1 is presented a list of characters studied by the various workers in barley genetics. Recommended symbols are given for each character, as well as the previous symbols used when different from the recommended symbol and the author describing the character. The symbols are listed alphabetically to facilitate the allotting of new symbols to additional characters.

In making this list, direct reference is given to authors who gave symbols to the characters or studied the linkage relationship of several factor pairs. Some of the earlier workers who reported simple mendelian ratios for certain factor pairs are, therefore, omitted.

LINKAGE GROUPS

The linked genes are placed in seven linkage groups corresponding to the seven chromosomes. Linkage groups have been established on the independent inheritance of genes in different chromosomes. The linkages and associations reported in the literature are listed in Table 2.