

bins, according to quality, and each bin-lot was cleaned separately. A sample from each bin-lot was then taken and analysed. The results are reported in Table 1 as "During (bulking) but after cleaning". The data show that the three bins differed significantly from each other in content of total foreign seeds and in percentages of purity and hard seeds, but the germinations did not differ significantly. The three bin-lots were then blended by running a stream of seed from each of the bins into an elevating leg which spouted the seed into a bin over the scales. The bags were filled at a rate which did not permit bulking or piling up in this bin. From the first 104 bags to come off, 100 samples were taken and these show, on the whole, a very satisfactory degree of homogeneity.

Finally, Series 12, red clover, was a carload lot containing 24 lots of seed from individual farmers. The lots were individually cleaned over a Clipper mill and a gravity machine and the seed bagged and shipped to the seed firm for blending. Each lot was sampled by automatic sampler as it was run into the blending bin, one sample representing each lot. The analyses on these samples are reported in Table I and show extremely wide variation both in percentage of pure seed and of other crop seed of the lots going into the blend. The seed was then blended by proportional delivery from each of the bins over a spinner whence it fell into the blending pit. This process was repeated three times, after which the seed was elevated into a carload bin and sacked off. An automatic sampler took an overall sample of the blended seed, which gave: - Pure seed 98.73%; Other crop seed, 0.84%. As the bags were filled, approximately 2 ounce samples were taken from each and composite samples representing every 10 bags were prepared and analysed, a total of 40 samples representing 400 sacks of 150 lbs. each.

The results of these analyses are given in Table 1 and show a great reduction in variability. While variability was still excessive, chi-square was one fiftieth of its value before blending, for per cent pure seed and one hundredth of its value before blending, for per cent other crop seeds. The values of chi-square after blending would have been reasonable if half the official quantity had been analysed. The average percentage of pure seed and other crop seed based on 40 samples correspond reasonably well with those of the overall composite sample.

#### \* REPORT OF SUBCOMMITTEE ON INJURED WEED SEED

The work of this subcommittee has just been initiated. The purpose is to investigate the viability of injured or immature weed seed. This information will be used to make definite recommendations to the Rules and Regulation Committee as to what should or should not be classed as inert material.

Members of this association have suggested that seed of the following weed species should receive attention: Allium vineale, Agropyron repens, Sonchus arvensis, Plantago lanceolata, Cuscuta spp., Cirsium arvense, Brassica spp., Daucus carota, Achillea millefolium, and Bromus spp. The committee intends to begin work on the seed of as many of these species as is possible during the coming year. - Leroy Everson, Iowa State College, Ames, Iowa.

#### REPORT OF COMMITTEE ON RULES AND REGULATIONS

The Rules for Testing Seeds were revised at the annual meeting of the Association in 1949. They have subsequently been published in the Proceedings of the Association and a supply of reprints was obtained for distribution. During the past year the committee received a few suggestions for change in the rules. In addition, a few suggestions, which were offered too late for inclusion in the 1949 revision, have been carried over for future consideration.

In developing the 1949 revision the committee has worked closely with representatives of the United States Department of Agriculture in an effort to make the rules of the Association and those of the Department of Agriculture uniform in all essential respects. Consequently, the two sets of rules will become effective July 1, 1950, and are alike or essentially so, in details.

The committee was requested to give consideration to clarification of the existing definitions of pure seed, other crop seed, and inert matter as they relate to insect-injured seed and possibly to recommend a rule change to this end. The committee is of the opinion that it is not in a position to recommend a change in the rules at this time but suggests that the committee on standardized tests include in its report a statement which will