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EFFECTS OF BRACTEAL LEAF OF SUNFLOWER ON THE YIELD OF SEEDS

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A test was made by pruning away the bracteal leaf of sunflower to know how the bracteal leaf effects the yield of seeds. The result shows that the bracteal leaf of sunflower can increase the photosynthetic area and its efficiency. The bracteal leaf makes a contribution to the economic output for it is the nearest source to the seed sinks and most of the carbohydrates can be carried to the seeds. Its influential range is different according to the pruning period, the number of the cut bracteal leaf and the varieties of sunflower as well.

The number of the edible variety which the bracteal leaf was 100% cut away during the flower buding phase, the flowering phase and the phase of being the milk decreases 0.6 - 8.8% than the single plateau of the check. The rate of its empty shell increases 2.1 - 3.1%. The weight of 1,000 grain is different every phase for it increased 7.0-8.0% than the check during the flower buding phase and the flowering phase and decreased 0.1 - 2.0% during the phase of being the milk. The range of the seed yield decreases 1.9 - 7.6% than the check. The oily variety is the same as above except that the influential range is lower than the edible variety and the seed yield decreases 1.8 - 5.1% than the check.

The result of T value test, on statistics, is that the ranges on the reduction of output for three treatments are different obviously than the check when the bracteal leaf was 100% cut away during the flower buding phase and the flowering phase for the edible variety and during the flower buding phase for the oily variety.

The test also tells that the percentage of the bractea leaf areas to the total leaf areas is different among the varieties of sunflower. Thus care must be taken to choose the bracteal leaf areas at the time of breeding the sunflower.