

seeds from this odd plant were sown and a crop raised. In this population a clear segregation between entire and branched bases was noticed. Counts were taken and gave 342 unbranched and 127 branched bases (*vide* illustration). The segregation was sharp.

The branching occurred over an area of two inches at the base. An analysis of this area together with a corresponding two inches of the normal unbranched area gave the following figures:—

		Unbranched area	Branched area
Number of branches	28
„ fascicles	..	142	1,446
„ grains	..	437	1,431
„ grains in a 2 gm. weight	..	135	263
Weight of grains (gm.)	..	6.39	10.95
„ chaff (gm.)	..	.96	2.95

The above table clearly reveals the economic disabilities of this branched atavistic condition which has proved a simple recessive to the normal rod-like inflorescence of this millet.

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Peucedanum graveolens—A New Host of Powdery Mildews.

DURING the last winter season a local variety of *Peucedanum graveolens* commonly known as soâ—a herbaceous plant used in curries and cultivated for its seeds and leaves—was found to be attacked by powdery mildews. Subsequent observations indicated that the first sign of the disease is found in the appearance of small white specks on the lower filiform leaves. The infected spots enlarge, coalesce and gradually cover the entire assimilating surface. With advance in season, the fungus spreads from leaves to the stem and finally infects the inflorescence. In severe cases the attack is damaging and the seeds fail to mature properly.

The usual organism appears to be similar to what has been described by Uppal and Desai on *Cuminum Cyminum*.¹

Detailed investigation is, however, in progress and will be reported subsequently.

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¹ *The World's Grasses*, 1929, p. 18.

² *Fl. Trop. Afr.*, 9-6, p. 1046.

¹ "Cumin Powdery Mildew", *Dept. of Agriculture, Bombay, Bull.* No. 169, 1932.

The Method of Selecting a Representative Sample in Social Research.

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IN Social Research, it is often required to estimate the average value of a character of some individuals. Such averages may be calculated whenever possible from the data supplied by the decennial census in India. These data do not, however, always provide the necessary material required for all types of population research and it is, therefore, imperative that fresh inquiries should be undertaken from time to time to collect the material.

It is, however, obvious that an *exhaustive* inquiry cannot be undertaken every time for want of both time and money. Nor is it necessary for the attainment of sufficiently accurate results. It is therefore advisable to base the results on the data supplied by

the process of sampling. This process has been termed the 'Representative Method'.

It has been shown by Dr. J. Neyman that the most general aspect of the representative method is that of random stratified sampling of groups.¹ The method consists in dividing the population studied into parts called 'strata' and in sampling randomly from separate strata. The number of sampling elements to be chosen from each stratum may be determined by any one of the following methods:—

(1) The method of proportional sampling suggested by Professor A. L. Bowley.²

¹ J. Neyman, *Jour. Roy. Stat. Soc.*, 97.

² A. L. Bowley, *Bull. Int. Stat. Inst.*, 22.