The activity of potentized substances

Experiments on plant growth and statistical evaluation

WILHELM PELIKAN (experimental work) and GEORG UNGER (statistical evaluation)

The plant growth trials

Samuel Hahnemann introduced the method of making medicinal preparations by alternating dilution and succussion or trituration (potentization, with decimal potencies diluted 1:10, centesimal potencies 1:100). Time and again there has been violent controversy as to whether these potencies are therapeutically active or not. The effects observed in patients and healthy subjects are often put down to suggestion. As far as the action of potentized remedies on human beings was concerned, such a reaction was understandable, particularly since the results of placebo trials became known. However, homœopathic potencies are also used in the veterinary field and here effects due to suggestion are not very likely. Unfortunately the case material available in this field is not generally known and has not been systematically assessed to give evidence of efficacy.

The situation is different when it comes to demonstrating the effects of potencies on plants. In this case there is no possibility of suggestion affecting the results. The idea of carrying out this type of biological trial was originated by Rudolf Steiner. Mrs. L. Kolisko started experiments along these lines in 1923 and published her findings in a series of papers. Other authors followed, some using a modified technique, so that a considerable amount of published material is available on the subject. More recently, Th. Schwenk has systematically reproduced and verified part of Kolisko's work. All these researches confirm that the action of potentized substances can be demonstrated on plant growth (higher and lower plants).

L. Kolisko mostly used wheat in her experiments, but she also did some trials with sunflowers, gladioli, crocuses and others. The plants were grown on a substrate of water and soil, but trials were made both in the laboratory and out of doors. (Later, animal experiments with mice were done as well.) The results are available in graph form for a large number of potentized plant and mineral substances.

The present work concerns the reproduction of a small part of Kolisko's work, but with experimental methods more adapted to laboratory conditions. Wheat was used, but the grains were not sorted. The careful selection of equal grains was a feature of Kolisko's trials, with the aim of achieving even growth in each of the dishes. No such selection was made in the present trial, so that there

Translation from the German of *Die Wirkung potenzierter Substanzen* published by Philosophisch-Anthroposophischer Verlag am Goetheanum, Dornach, Switzerland, in 1965. This translation is published with the kind permission of the authors and of the publishers.