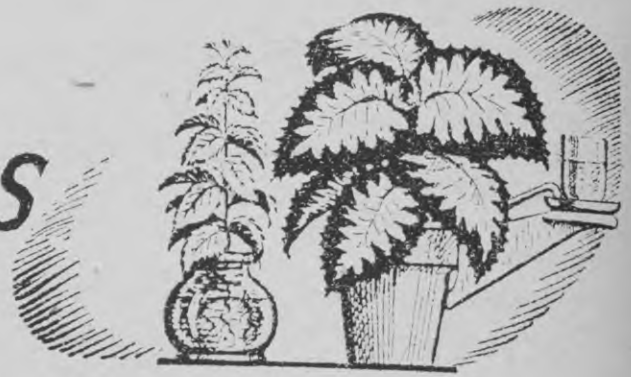


Hydroponics

— By H.C.A.W. —



At last! No more back-breaking digging! No more fights with slugs and eelworms! Gardens on the roof or in the cellar! Fresh vegetables picked direct from the pantry shelf; flowers growing in the vases!

These and many more fantastic claims became catchwords a few years ago when the practice of Soilless Culture first broke out from the bounds of scientific experimenters and became the temporary plaything of sensation-loving journalists and newspapers. Almost overnight a method of raising plants without soil grew from being the subject of careful experimentation into becoming a widely publicised topic of interest to all gardeners. The inevitable result was a series of endless false claims and exaggerations, which in turn due to the countless failures of casual experimenters, resulted in a quick relapse to the comparatively obscure limbo of serious workers.

It has been known to experimental botanists and plant chemists for well over fifty years that plants could be grown successfully in nutrient solutions, but it was not until 1929 that soilless culture broke the laboratory bounds and became associated with practical horticulture. In that year Professor Gericke, of the University of California, gave a demonstration of practical water culture by producing a tankful of tomato plants which grew so tall as to necessitate picking the upper fruits from a ladder. After this, the Press seized on the story and irresponsible prophecies were made concerning "the most revolutionary and sensational scientific discovery for centuries."

Professor Gericke termed his method "Hydroponics," and, although this name is still widely used, it is now

generally replaced by "Soilless Culture" since, as will be seen later, the latter term covers all methods of soilless culture whereas the former is a correct name for only one of the methods.

In America the new method of cultivation became a "racket" of high degree, mushroom companies springing up almost overnight to exploit a credulous public. Even in New Zealand this took place to a certain extent and many people wasted an "annual subscription," with extras, with such an organisation, only to find that the path to success was not easy to attain in such a way. Consequently, more cautiously-minded people regarded the whole business with suspicion and had little, if anything, to say in favour of soilless culture. During the intervening period between this sensationalism and the present day, serious experimenters and practical producers have continued to work carefully and scientifically. The result is that soilless culture can now no longer be termed a "fad" or a "stunt," as it has become a proven and accepted, though specialised, branch of horticulture. So much is this the case that most of the latest information and experimental results are coming from professional nurserymen.

It is not thought likely that soilless culture will become a "big thing" in New Zealand in the near future, for a wide variety of reasons, but at the same time the question is asked frequently "what is Hydroponics—and has it any practical application?" The purpose behind this necessarily brief outline is to answer this question as well as space permits. It should be understood, however, that "Soilless Culture" remains a method subject to further experimental work, and will, at all