

THE AGE OF WELWITSCHIA BAINESII (HOOK. f) CARR.: C14 RESEARCH.

by H. HERBE

(With Plate XVII)

(*University Botanic Garden, Stellenbosch*)

With the kind assistance of Mr. E. Jensen of Walvis Bay, I was fortunate enough to receive an old remnant of a *Welwitschia* plant from Heikamgab near Swakopmund during the second half of 1958. The oldest part was sent to the United States of America for a radio-carbonic C14 test to estimate the age of this particular plant. As *Welwitschia* does not form rings which can be counted, it is not possible to estimate its age by this means. With the kind assistance of the National Geographical Society, Washington, D.C., I was referred to the Director of the Production Research Division of the Humble Oil and Refining Company at Houston, Texas, who was willing to undertake this work free of charge in the service of science. For this I would like to convey my most sincere thanks.

For the purpose of comparison they asked for another piece of which the age was known to us, and I sent them a small plant of 15 years of age which we had raised from seed and which had died. In addition, Professor Elso S. Barghoorn of Harvard University was able to supply more parts and thus the research could be started. The result became known in February, 1960, the age of the plant being given as about 500—600 years.

As our photograph shows (Fig. 1), one part of the plant is still alive while most of it is dead. Of these dead parts one half was sent to the Botany Department of the University of Stellenbosch while the other part is exhibited in the Museum in Swakopmund, S.W.A. The living part still flourishes.

The plant shown in our second photograph (Fig. 2) may well be about 2,000 years old.



FIG. 1.



FIG. 2.

PLATE XVII. *Welwitschia bainesii* (Hook. f.) Carr.
 FIG. 1.—Plant in Namib Desert. Part of it is still alive.
 FIG. 2.—Possibly the largest living plant, about 2,000 years of age.
 (Photos: E. Jensen, Walvis Bay, S.W.A.)