

# Portrait of Friedrich Welwitsch

Making Historical Natural Collections more accessible through digitisation

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For the last two years the Botany Department at The Natural History Museum, London has been participating in the African Plant Initiative (API), a project funded by the Andrew W. Mellon Foundation, which aims to digitise and database all African type specimens from the world's herbaria. The digitised material is made available through the Aluka website ([www.aluka.org](http://www.aluka.org)) which is a non-profit international collaboration of educational and cultural institutions.

The initiative here at the Museum will soon be completed and will include approximately 20,000 African angiosperm, gymnosperm, cryptogamic and algal type specimens.



Figure 1. The type specimen of *Welwitschia mirabilis* Hook.f. from the Aluka Website, also showing a magnified image of the bracts.

By contributing their collections to the API platform, the Museum and other participating institutions will have a means of offering access to their African collections to an international audience, far greater than ever before.

The specimens comprising The Natural History Museum's herbaria have been collected over three centuries by various collectors but when it comes to African material in general and African type specimens in particular, few other collectors are so thoroughly represented as Friedrich Welwitsch, both in terms of quantity, quality and accuracy in description.

Friedrich Martin Josef Welwitsch was born in Austria in 1806. He studied medicine at Vienna University, but moved to Portugal in 1839, where he subsequently obtained a commission as naturalist collector. After several years of exploring Portugal's territory, and also making extensive collections of the Portuguese flora and fauna, he was in 1852 appointed by the Portuguese King to explore the territory now known as Angola. And in 1853, he set sail towards St Paulo de Loanda.

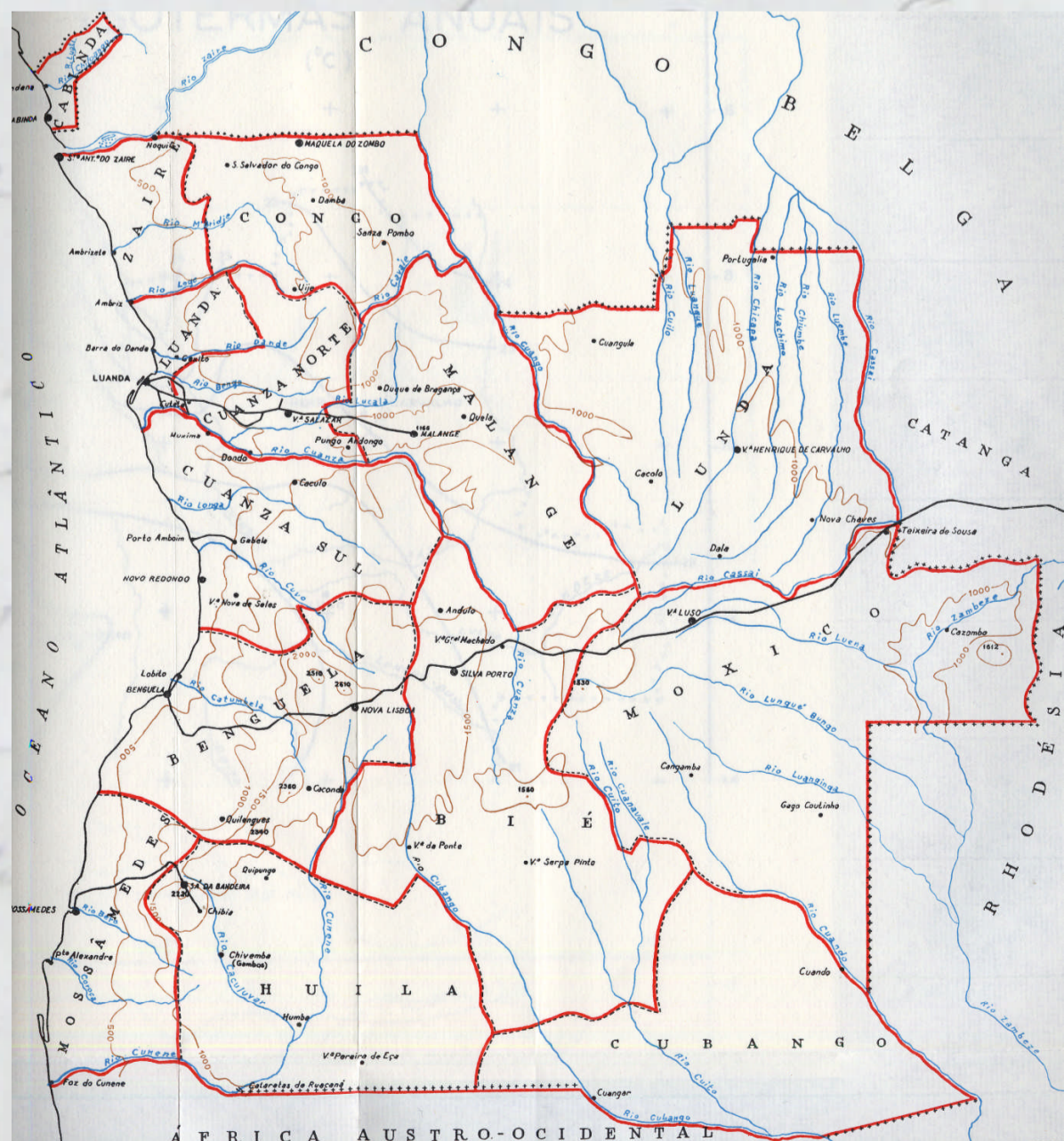


Figure 2. Map over Angola (from W.T. Stearn's The catalogue of the African plants collected by Dr Friedrich Welwitsch, 1973)

During his seven years in Angola, he collected upwards 5000 species of plants and 3000 species insects and animals, a large proportion of which were new to science. It was here Welwitsch discovered the remarkable plant which he named *Tumboa*, but which J. D. Hooker later renamed *Welwitschia* in his honour. Welwitsch's collections are unique, particularly because of the large amount of information included on the labels.

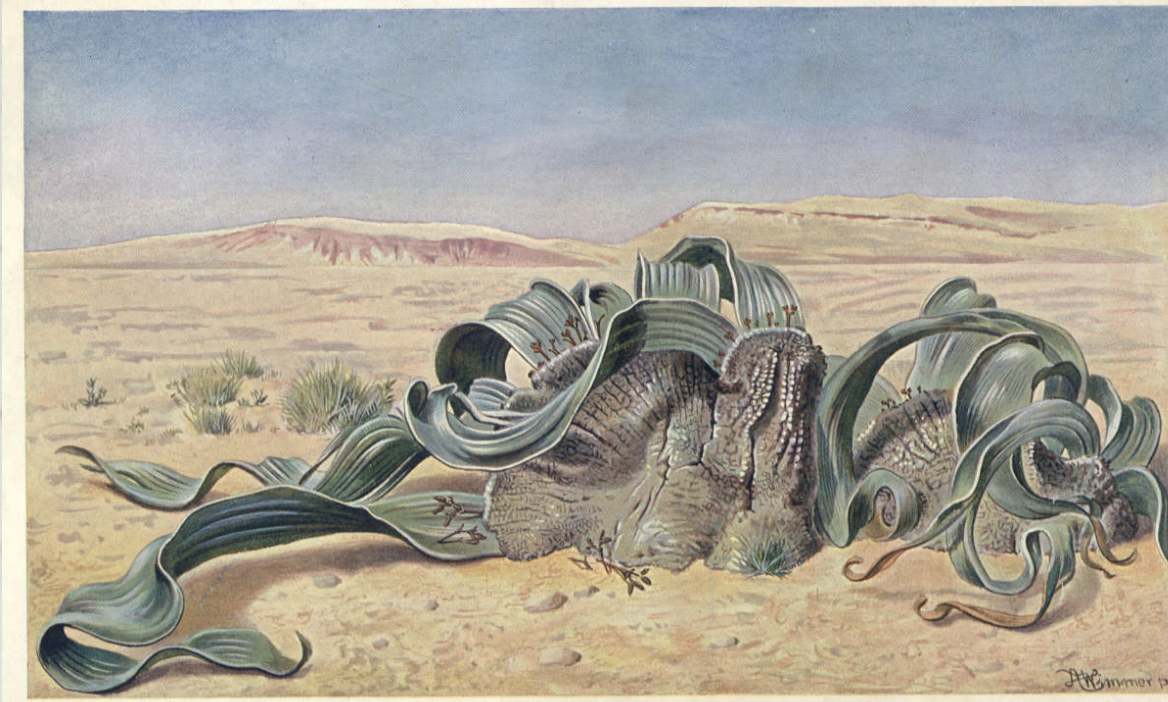


Figure 3. The family Welwitschiaceae is represented by the single species, *Welwitschia mirabilis* Hook f. A dioecious perennial xerophyte plant recognizable by the two long opposite leaves. It is limited in distribution to the desert margin along the south-west coast of Africa. (from H. Baum's Kunene-Sambesi-Exped. 1903)

On his return from Africa, finding it necessary to compare his specimens with those of British Institutions, Welwitsch obtained permission from the Portuguese Government to base himself in London where he was close to The Natural History Museum and Royal Botanic Gardens, Kew. He devoted the remaining nine years of his life, to studying and arranging his collections. The officials in Portugal were expecting a stream of reports from him on how to enrich both the home country and the colony through application of botanical science. However, Welwitsch did not deliver much work of economic significance. The Portuguese Government grew more and more impatient with his progress and eventually, in 1866, suspended his salary of £2 per day.

Welwitsch died in 1872 impoverished, and was buried in Kensal Green Cemetery. According to his will, Welwitsch directed that the first complete set, the *study set*, of his botanical specimens should be offered to The Natural History Museum for purchase; the next three sets were to be sent to Lisbon. Other remaining sets, for he had collected in quantity, were intended for various other herbaria. Welwitsch also bequeathed to Portugal his General and Portuguese herbarium, books, instruments and all of his zoological collections.

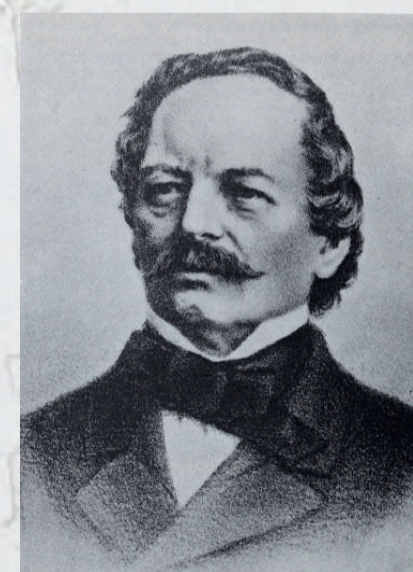


Figure 4. Dr Friedrich Welwitsch, aged 59 (from T.D.V. Swinscow's A centennial memoir, 1972)

The Portuguese Government however, claimed the whole of the collections for themselves, a claim which led to a court case which lasted three years, ultimately leading to a compromise, one set being retained by the Museum and the remainder of the specimens returned to Lisbon.

Although Welwitsch's achievements in economic botany eventually disappointed his Portuguese benefactors, his collections "far exceeded in number, quality and documentation any made before then in tropical Africa and remain up to this date a valuable source of information" (Stearn, 1973).

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