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The life and times of Ethel Mary Doidge, a pioneer of South African mycology

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Abstract: The South African National Collection of Fungi was established in 1905 and celebrated its 110th anniversary in 2015. The diverse history of the collection is marked by the name of Ethel Mary Doidge as she has been a companion of mycology in South Africa.

Key words: fungi, lichens, PREM, Pretoria, South African National Collection of Fungi.



Fig. 1. A young Ethel Mary Doidge.

The South African National Collection of Fungi (PREM) was established in 1905 and celebrated its 110th anniversary last year. When looking at the rich and diverse history of the collection, the name of Ethel Mary Doidge stands out above the rest. She was one of the finest and most passionate mycologists in South Africa, and made an enormous contribution to agriculture and the national collection. Her keen observational skills distinguished small differences between fungal species resulting in her depositing and describing numerous new fungal species.

Ethel was the daughter of Henry Doidge, an analytical chemist, and his wife Elizabeth Craven. She was born on 31 May 1887 in Nottingham, England, and was schooled at Epworth High School after the family moved to Pietermaritzburg in Natal, South Africa, in 1897. She matriculated

from Epworth High School in 1903 and commenced with a degree in botany at the Huguenot College, Wellington, with mycology as her main interest. After obtaining her Bachelor of Arts (BA) degree in 1907, she moved to Pretoria and joined the Transvaal Department of Agriculture as an assistant to Illyd Buller Pole Evans in 1908. In 1909 she obtained her MA degree from the University of Good Hope, and was awarded the university's Cornwall and York prize for her thesis (Gunn 1967).

Ethel paved the way for women in science early in the 20th century by being the first woman in South Africa to obtain a doctorate in any subject. In 1910, Ethel was promoted to Professional Assistant in the Division of Botany and Mycology, and in 1912 was elected a Fellow of the Linnean Society of London. This was followed in 1914 by the award of the degree of DSc by the University of the Good Hope for her thesis: *A bacterial disease of mango*. The disease that her thesis focused on was devastating the local mango industry at the time and was, thus, of high economic importance (Doidge 1915).

Ethel was affiliated with several societies within her discipline, and served on the councils of some of these. In 1915 she became a member of the South African Association for the Advancement of Science, serving as the President of Section C, which included botany, from 1918–19. During this time, she was also elected a Fellow of the Royal Society of South Africa. She was appointed as one of the members of the first Council of the University of South Africa. In 1916 she became a founder member of the South African Biological Society, and later served on its' Council.

She also received the Society's prestigious Senior Captain Scott Memorial Medal in 1920 in recognition of her work in plant pathology. In 1919 she was promoted to Assistant Chief of the Division of Botany and Plant Pathology, and in 1924 attended the Imperial Botanical Conference and the first Imperial Mycological Conference in London (Glen & Germishuizen 2010). In 1929 she was appointed Principal Pathologist to the mycological section of the newly created Division of Plant Industry, a position she held until her retirement at the age of 55 in 1942.

During her employment she published extensively on a wide range of microfungi and also some bacteria, especially ones involved in plant diseases. These included a checklist of plant diseases, *Citrus* diseases, and papers on rusts, *Alternaria* (Doidge 1929), *Cercospora*, *Fusarium* (Doidge 1938), and *Microthyriaceae* (Doidge 1920). She published 519 species new to science, mostly from South Africa. A list of her scientific publications is included in Gunn (1967),

Her services were retained for a further four years after retirement, however, during which she completed *The South African fungi and lichens to the end of 1945* (Doidge 1950). This enormous reference work of 1094 pages, remained the most important publication on the topic for decades, and indeed has never been fully replaced. The work was especially far-sighted in including the lichen-forming fungi, which hardly ever featured in "fungal" checklists at the time. Indeed, the names given to lichens did not even start to be catalogued by the *Index of Fungi* until 1970.

Aside from her mycological interests, Doidge held two licentiate diplomas for

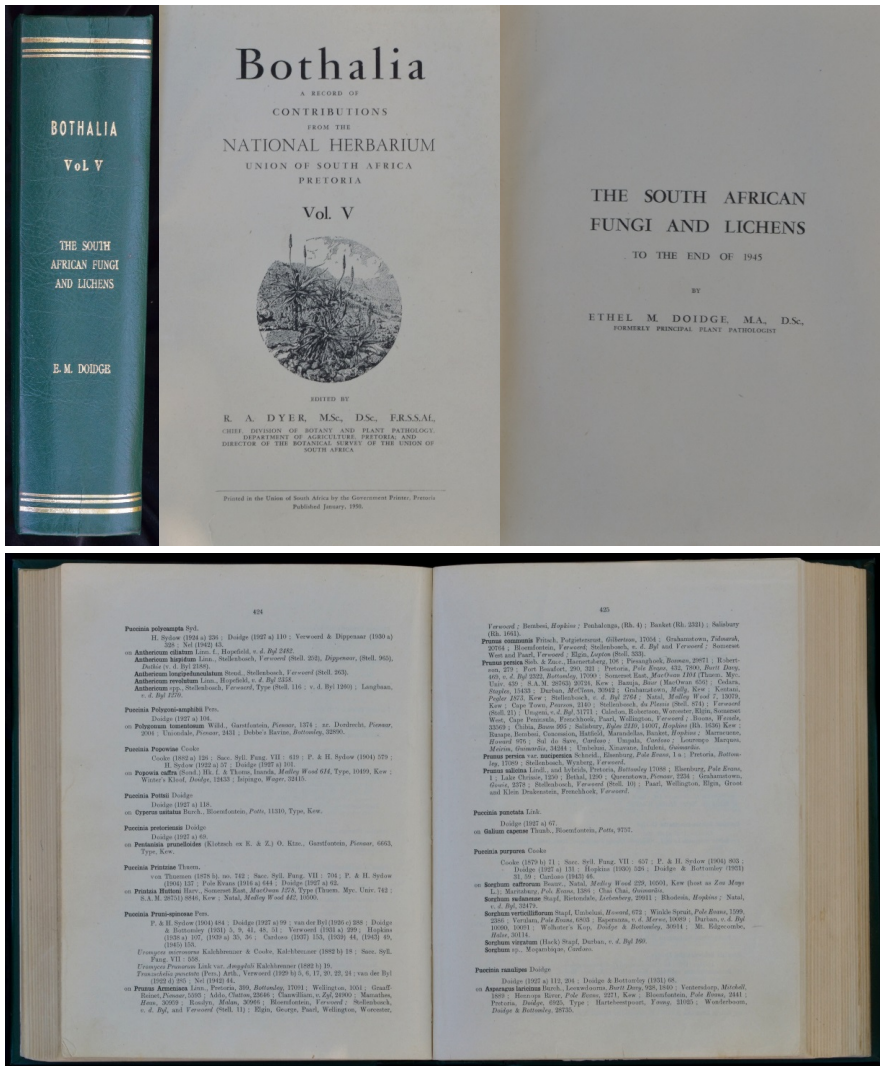


Fig. 2. The South African Fungi and Lichens published by Doidge (1950).

singing from the Trinity College of Music (London). She was also a skilled pianist and, for many years, was a member of the Pretoria Music Society. She passed away on the 22 September 1965 at Anerley on the south coast of KwaZulu-Natal.

Ethel's passion for mycology and her dedication to building an extensive reference collection to aid in the identification of fungal species formed the basis of the National Collection of Fungi in Pretoria (PREM) which currently houses 61 000

dried specimens of which ca. 3 000 are types. In the late 1980s, the PPRI living culture collection was established and today, as part of the South African National Collection of Fungi, houses 19 000 living fungal cultures.

Her contribution to South African mycology was fittingly summarized by Pole Evans in his Preface to the 1950 *Bothalia* volume: "She has tirelessly paved the way and truly laid the foundation on which Mycology in Southern Africa will be built. Great things no doubt will come from the further study of African fungi and more that is new from Africa will still arrive, but come what may, future workers in this field will rightly appraise the value of Dr. Doidge's work." How right he was.

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