



MATILDA

EFFECT



Pionierinnen der Forschung Female Pioneers of Research

**Pt.54
Alice Ball**



BESSEr@KIT





Alice Ball (1892-1916)
Chemist

After completing degrees at the *University of Washington*, she received a scholarship to the *University of Hawaii*, where she earned her Master's degree in Chemistry. This made her the first woman and the first African American to earn a Master's degree at that university.



After taking over the leadership of the Chemistry Department, she conducted research on the composition of *Piper methysticum*. Through this work, she became part of a team researching treatments for leprosy. Leprosy was a highly stigmatized disease. In Hawaii, infected individuals were isolated in an institution described as “the most cursed place on earth.” The only available treatment consisted of injecting oil extracted from the seeds of *Hydnocarpus pentandrus*.



However, injecting the oil was extremely painful, and lumps often formed under the skin.

By isolating the ethyl ester components of the oil, Ball was able to create a water-soluble, injectable extract that retained its beneficial properties.

Within three years of its use, more than 75 people with leprosy were freed from the typical skin lesions. In the following 15 years, no patients had to be isolated in the institution anymore.



In 1916, Ball died at the young age of 24 – she had likely been exposed to chlorine gas in the laboratory.

The president of the *University of Hawaii* continued her research but did not mention her name in any of his publications.

It wasn't until the year 2000 that Ball was formally honored: a *chaulmoogra* tree with a name plaque was planted at the university.





„Beharrlichkeit ist der Schlüssel
zur Entfaltung des Potenzials.“

„Perseverance is the key to
unlocking potential.“

