

# SCIENCE learning springboards

Pappus

## Famous plant hunters and botanists

### Explore the impact of female plant hunters and botanists in 19<sup>th</sup> and early 20<sup>th</sup> Century

**Aim:** Discover more about scientists who transformed the world's understanding of plants and fungi

Questions to ask: Why are botanists and plant explorers important? Do we still need plant explorers? What are the qualities of a plant explorer?

The basic level of data needed by a plant explorer in order to carry out robust science is:

- Who (the identifier of the plant, which gives a level of confidence in accuracy/ability)
- What (the species identified)
- Where (its location - coordinates)
- When (date collected in field).

This underpins all biological data within the global scientific community and allows huge and reliable scientific interrogations to occur.

Darwin is perhaps the most famous botanists and Carl Linneaus originally described all species using his binomial naming system, a Latin name composed of two parts, for naming species and classifying them. His initial 'L' still post-scripts many species that he described back in the 1700's. This is now referred to as a scientific name.

Here are a few, perhaps lesser known, female scientists that pupils may wish to research.

- Marianne North, 1830-1890. Intrepid explorer, plant hunter and painter. Female explorers were unusual in the Victorian era. She has her own gallery at Kew Gardens, to display her work.
- Beatrix Potter, 1866-1943. Conservationist, artist and writer. She is well known for her children's books, but pupils may also be interested to find out about her life in the Lake District and her work as a conservationist.
- Janaki Ammal (pictured right), 1897-1984, is credited with making sugar sweeter! Her father loved science and she learnt a lot from him before she went on to become Professor of Botany in India. She researched varieties of sugar cane that would grow well and improved productivity, and 'made sugar sweeter' She was also interested in ethnobotany and plants for medicinal and commercial use.
- Mary Agnes Chase, 1869-1963. Botanist and suffragist. Born in Chicago, USA, she was a scientific illustrator for museum publications. She figured out how to use a microscope and do technical drawings. She primarily studied grasses.
- Agnes Arber, 1879 – 1960. One of the most important botanists of her generation, being responsible for helping develop the understanding of flowering plant taxonomy.



#### Resources:

Research on-line



Women in Botany  
Kew Gardens

250 years of Women in Botany is an exhibition at Kew Gardens and on the Kew Gardens website. It is a good introduction to the theme that will provide a wealth of further information.

#### Key vocabulary:

Botany, explorer, global, biological, conservationist, suffragette, taxonomy

#### Success criteria:

- ✓ I can use my research skills to investigate the lives of female plant hunters and botanists in history
- ✓ I can present my findings referring to key influences of their life on the botanical world

