

Miles Joseph Berkeley (1803 – 1889)

Miles Joseph Berkeley, the second son of Charles Berkeley and his wife Charlotte Munn, was born at Biggin Hall, near Oundle, Northamptonshire, England, on 1 April 1803. He was a descendent of the Spetchley branch of the Berkeleys who in the 1730s rented Biggin Hall, a newly built manor near the village of Benefield, and seem to have been its executors and agents until the property was sold in the 1820s. Charlotte's father James Munn was a carriage decorator and landscape painter.

Miles Berkeley attended Oundle Grammar School and then Rugby, where his ability and early interest in natural history were fostered. He entered Christ's College Cambridge in 1821, graduated in 1825, and during summers spent in Scotland made collections of the lower forms of animals and plants. The influence of Professor Henslow at Cambridge, and cryptogamic botanist Captain Dugald Carmichael of Appin, led Berkeley to devote his leisure to serious study of the cryptogamic flora. After his ordination in 1827, his first important curacy was St John's, Margate, where the marine algae attracted his attention, and nearly all his subsequent work was in the field of mycology, in which he excelled.

On 28 January 1833 he married Cecilia Emma Campbell, whose linguistic and artistic skills were to be a great help in his work. In 1834 he was appointed chaplain to the Earl of Westmoreland, and moved to the village of King's Cliffe. His *Monograph of the British Fungi* (1836) constituted the third volume of Hooker's supplements to James Edward Smith's *English Flora*; it made Berkeley's reputation and was followed by a flood of further publications. He also investigated plant diseases,

and his findings on potato blight and vine mildew were of special economic importance. In addition to his clerical duties and intensive scientific work, he took in paying pupils to help support his large family.

For nearly fifty years British and foreign specimens were sent to Berkeley, a practice initiated by William Hooker and continued by Kew's two succeeding directors, Joseph Dalton Hooker and William Thiselton-Dyer. The only large collection of New Zealand fungi was made on Captain Ross's Antarctic expedition (1839–43), mainly at the Bay of Islands, but Colenso and other local naturalists were encouraged to collect fungi as well as plants and forward them to Kew. The first fungus recorded from New Zealand was a "vegetable caterpillar", *Cordyceps robertsii*, described by William Hooker in 1836. *Cordyceps sinclairii*, which attacks larvae of the cicada, was named by Berkeley in 1855.

In 1868 Berkeley was appointed vicar of Sibbercroft, near Market Harborough, where he died on 30 July 1889, at the age of 86. He had been awarded the prestigious gold medal of the Royal Society in 1863, and shortly after being elected a fellow of the Royal Society in 1879 he presented his extensive collection of fungi to Kew. Although Berkeley described nearly 6000 species worldwide, few fungi have been named after him. His Swedish contemporary Elias Fries was the first to describe *Polyporus berkeleyi*. Then, in 1941, German mycologist Rolf Singer placed it in the new genus *Bondarzewia*. A large cosmopolitan woodland fungus, *Bondarzewia berkeleyi* in New Zealand is currently under investigation.

Bondarzewia berkeleyi

Widespread and the most memorable of the four species in the genus, *Bondarzewia berkeleyi* is found in eastern North America, Sri Lanka and several countries of the Pacific Rim. The distinctive fruiting body forms a large compound fleshy yellow-brown rosette reaching up to half a metre or more across on the forest floor, or sometimes on logs or decaying parts of living trees. It was first recorded in New Zealand in 1927 (as *Polyporus berkeleyi*) and has since been seen from Northland to the Otago lakes, associated with a range of hosts, mainly in January through to April.

