Rachel Brown Biography

Rachel Brown

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites".

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers".

Contents

Biography

Born in Massachusetts but raised in Webster Groves, Missouri, Brown was encouraged by a retired school principal to appreciate nature in her early school years. The school principal provided Brown with an insect collection and taught her how to mount the insects properly. While this experience did not directly lead Brown to focus on science in high school, it is likely that it helped shape her interests in her education at Mount Holyoke College, which was sponsored by a wealthy family friend.

Due to her lack of a strong high school science background Brown decided to major in history, but after taking chemistry as a sophomore, she opted to pursue a combined history and chemistry major. Upon graduation Brown was encouraged to pursue advanced studies, and once again was granted educational funding that enabled her to attend the University of Chicago. By 1933 Brown had earned a doctorate in organic chemistry with a minor in bacteriology. During her course of study, Brown worked intermittently as a lab assistant, preparatory school teacher, and assistant chemist at the New York State Department of Health in Albany. It was the latter job which led to Brown's interest in disease research.

Brown became interested in the functions of antibiotics and later fervently studied the deadly disease pneumonia, caused by fungal infections. Although the recently-discovered drug penicillin cured many diseases, it had no effect on fungal infections. Besides pneumonia, many other fungal diseases caused such widespread ailments as moniliasis, or thrush, which makes eating excruciatingly painful.

Shortly after World War II, Brown joined Elizabeth Hazen, a microbiologist at the state laboratory, on a research project in mycology, the study of fungi. In the fall of 1950, Brown and Hazen announced at a National Academy of Sciences meeting that they had successfully produced two antifungal agents from an antibiotic. At that time fungicides were used to treat fungal diseases of plants, but not yet employed to treat fungal diseases and infections in humans. By 1954, Brown and Hazen had developed Nystatin, the first fungicide safe for humans. Nystatin was immediately used nationwide, earning $135,000 in the first year. However, the pioneering civil servants Brown and Hazen chose not to accept any royalties from the patent rights for Nystatin. Instead, they established a foundation to support advances in science.