

My View

Robert L. Zimdahl*

Henry Luke Bolley was born February 1, 1865, on an Indiana farm. He was an early weed worker, cited in many weed science textbooks, but was not trained in weed science. He was a plant pathologist and a creator of weed science. I hope this brief report of his story will stimulate others to record the stories, experiences, and counsel of our predecessors while they can. We need these stories—our history—not to learn how to proceed and succeed but to know who we are.

Purdue awarded Bolley a B.Sc. in 1888 and an M.Sc. in plant pathology in 1889. He became one of the first members of the North Dakota (ND) Agricultural College's faculty of agriculture in 1890 and was a founder of the ND Experiment Station. His interests extended beyond plant pathology and weed control. At Purdue, he was an organizer of the first football team and later coached the ND team.

Bolley is frequently cited as one of the first in North America to study selective control of broadleaved weeds in cereals by broadcast spraying of heavy metal salts. His research goal was to determine whether chemicals of sufficient strength could destroy weeds but not injure cereal grains and beneficial grasses. He proposed that a sprayer could be used for field application and helped develop suitable spraying machinery. His research was so successful that farmers in many states began spraying to control weeds in cereals.

ND Experiment Station Bulletin 80 (1908) describes his view of the future of selective chemical control. "Each year our experiments have resulted in success of such marked nature that the writer feels safe in asserting that when the farming public have accepted this method of attacking weeds as a regular farm operation that the gain to the country at large will be greater in monetary consideration than that which has been afforded by any single piece of investigation

applied to field work in agriculture. If, therefore, this method of attacking weeds by means of chemical sprays is one-quarter to one-half as successful in general operation as the writer is willing to vouch for, the money returns to the spring wheat growing states must far exceed the hopes of the most optimistic." The advent of 2,4-D and its many successors demonstrate the validity of Bolley's prophetic words.

Over the past two years I have studied *The History of Weed Science in North America* (Zimdahl 2010). It was disappointing to learn that so many personal and professional stories of the founders of weed science have been lost. Many have died, and although their names are known and will be remembered for a while, on death, their stories are lost forever.

History is about people and what they did or did not do. The records of the early years of weed science and the scientists are fragmentary or absent. We know a bit about who did what and when it was done but little about why decisions were made and the lives and careers of our predecessors. Much of the past is contained only in the memories of those who were present and it disappears quickly.

Bolley, a plant pathologist by training, was a weed science pioneer. He recognized the potential benefits of selective chemical weed control in the latter part of the 19th century, before farmers were ready to adopt it. His story helps us know where we came from. It is My View that many others should be recorded. They will help us know who we are.

Literature Cited

Zimdahl, R. L. 2010. *A History of Weed Science in North America*. Oxford, UK: Elsevier. 207 p.

DOI: 10.1614/WS-D-10-00043.1

*Professor Emeritus, Department of Bioagricultural Sciences and Pest Management, Colorado State University, Fort Collins, CO 80521. Corresponding author's E-mail: pmccull@uga.edu