

Book Review

Griffith, C.S., Sutton, T.B., Peterson, P.D. (eds.). 2003. Fire Blight – The Foundation of Phyto bacteriology: Selected papers of Thomas J. Burrill, J.C. Arthur and M.B. Waite. APS Press – The American Phytopathological Society, St. Paul, Minnesota, 145 pp. ISBN 0-89054-309-7.

The fire blight caused by a bacterium *Erwinia amylovora* is probably the most devastating disease of fruit trees as it can destroy orchard in a single season. This bacterium and the caused disease is historically very important as it opened the way for all future study of bacterial plant diseases. For this reason the American Phytopathological Society decided to re-publish the selected papers concerning first decades of fire blight research. Principles of selection are explained in the "Preface" (p. IV–V)

In the introductory chapter titled "Fire blight: the history, science and politics of a disease" (p. 1–10) the editors review the history of studies of plant diseases and their etiological agents in Europe and in the North America. Contributions of Anton DeBary, Robert Koch and other European and American researchers are mentioned.

The main part of this book form the biographies and historical papers of the three following early researchers of fire blight.

1. Thomas Jonathan Burril (p. 11–21)
2. Burril, T.J. 1879. Discussion on the reports from Transactions of the Illinois State Horticultural Society (p. 22–28).
3. Burril, T.J. 1881. Blight of pear and apple trees (p. 29–60).
4. Joseph Charles Arthur (p. 61–69).
5. Arthur, J.C. 1886. Proof that bacteria are the direct cause of the disease in trees known as pear blight (p. 70–72).
6. Arthur, J.C. 1886. History and biology of pear blight (73–93).
7. Merton Benway Waite (p. 94–106).
8. Waite, M.B. 1892. Results from recent investigations in pear blight (p. 107).
9. Waite, M.B. 1898. The life history and characteristics of the pear-blight germ (p. 108–109).
10. Waite, M.B. 1902. Relation of bees to the orchard (p. 110–116).
11. Waite, M.B. 1904. Pear blight and its treatment – life history of the disease (p. 117–125).

The book contains also the up-to-date information on fire blight presented in the last part "Conclusion: Fire blight in the 20th Century" (p. 126–133). It emphasizes that in terms of the geographic spread of the fire blight, the 20th century "was an active and sometimes nerve-wrecking periods". The disease – in spite of quarantine regulation – moved around the globe and was recorded in over 40 countries e.g. 1903 – Japan, 1919 – New Zealand, 1958 – England, 1966 – Poland and the Netherland, 1971 – Germany.

Many general aspects are discussed in that part including mechanism of *E. amylovora* pathogenicity that is regulated by hrp genes being responsible for production of harpins-proteins associated with bacterium pathogenicity.

I strongly recommend this book to all persons working in phytopathology and to all specialized libraries.

Jerzy J. Lipa
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