

JOHANNA WESTERDIJK
1883-1961

Johanna, or Hans, Westerdijk was born on 4 January 1883 in Nieuwer-Amstel (now Amsterdam). Her father was a physician, and he and his wife encouraged Hans's scientific, artistic and musical interests. After finishing the 5-year HBS for girls in Amsterdam, she decided to study biology at the University of Amsterdam. She matriculated in 1900 and attended the lectures in botany of Hugo de Vries, who at first did not allow her to take part in the practical instruction. Thereupon Westerdijk organized her own instruction at the Phytopathological Laboratory Willie Commelin Scholten (WCS). In 1904 she received her diploma as teacher in biology and geology. That same year she went to K. von Göbel in Munich to study liverworts. In 1906 she received her Ph.D. under H. Schinz in Zürich on a dissertation *Zur Regeneration der Laubmoose* (1906).

In March 1906, on recommendations from De Vries and F.A.F.C. Went, Westerdijk obtained an appointment as director of the WCS. She kept this position until her retirement in 1952. The Centraal Bureau voor Schimmelcultures (Central Bureau for Fungus Cultures, CBS), an institution for the study and preservation of fungi and yeasts, founded by Went in 1903, was brought under her direction in 1907, and Westerdijk remained its director until 1958. In 1921 the WCS and CBS were transferred to more spacious premises in the village of Baarn near Amersfoort. Both institutions flourished under the inspiring guidance of Westerdijk, the CBS becoming the largest collection of fungi and yeasts in the world.

In 1913-1914 Westerdijk visited the Dutch East Indies, the United States and Japan. She enlarged the collection with parasitic and saprophytic fungi from the tropics. The striking differences in the morphological and pathological expression of fungal diseases in tropical and temperate climates guided much of her later research. In 1917 Westerdijk was appointed extraordinary professor of phytopathology at the university of Utrecht, thus becoming the first female professor in the Netherlands. In 1930 she received the same appointment at the university of Amsterdam. In her inaugural oration of 1917 (*De nieuwe wegen van het phytopathologisch onderzoek*) she made a strong plea for a shift in the phytopathological field of research from wild flora to cultivated plants.

Westerdijk was a good teacher and an excellent organizer. She inspired biology students in both universities to study phytopathology and to pursue the doctorate degree. In total, she directed 56 dissertations. With one of her doctoral students, Christine Buisman, she published, in 1929, the standard work on the Dutch elm disease. In later years her deteriorating eye sight hampered her own scientific research, but she retained her organizational capacities, creating an artistic atmosphere at the WCS. Although a striking number of her students were female, Westerdijk did not see herself as a feminist. Yet she helped improve the position of women in academic research; in 1932 she became president of the International Federation of University Women.

In 1951 Westerdijk became a member of the Royal Netherlands Academy of Arts and Sciences. She received doctorates honoris causa from the universities of Uppsala (1957) and Giessen (1958). Westerdijk never married; after her retirements she lived in her apartments at the WCS until her death on 15 November 1961.

Primary works

Incomplete bibliography of primary works and obituary notices, full list of dissertations of students in Löhnis, *Johanna Westerdijk* (see below). Letters in the archive of the University of Utrecht.

Secondary literature

'Westerdijk-nummer', *Vakblad voor Biologen* 12 (1930-1931) 125-156; 'Westerdijk-nummer', *Tijdschrift over plantenziekten* 58 (1952) no. 6, 199-268; V.J. Koningsberger, 'Levensbericht van Johanna Westerdijk (4 januari 1883 - 15 november 1961)', *Jaarboek der Koninklijke Nederlandse Akademie van Wetenschappen* (1961-1962) 305-311; L.C.P. Kerling et al., 'Johanna Westerdijk: Pioneer leader in plant pathology', *Annual Review of Phytopathology* 24 (1986) 33-41; M.P. Löhnis, *Johanna Westerdijk. Een markante persoonlijkheid* (s.l., 1963) with an incomplete bibliography, a list of commemorative texts, and a list of dissertations by her students; M. Bosch, *Het geslacht van de wetenschap. Vrouwen en het hoger onderwijs in Nederland 1878-1948* (Amsterdam: SUA, 1994) 391-428; *idem*, 'Johanna Westerdijk (1883-1962

[sic!)]', in: H. Jamin, ed., *Zes keer zestig. 360 jaar universitaire geschiedenis in zes biografieën* (Utrecht: Universiteit Utrecht, 1996) 68-75.

P. Smit, in: *BWN*, vol. 2, 616-617.

[L.C.P.]