

Mushroom Industry Scientist Donates Papers To Penn State

UNIVERSITY PARK, (Centre Co.) — A man who could easily be described as "the Henry Ford of mushroom science" has donated part of his personal library to Penn State's Mushroom Spawn Laboratory, giving the College of Agricultural Sciences an invaluable historical resource for students.

James W. Sinden, 92, was a professor of botany at Penn State from 1930 until he resigned in 1952 to work for the Hauser Champignon Laboratorium in Zurich, Switzerland. In 1932, Sinden developed and patented a grain spawn — simply put, a seeding system to grow mushrooms — that revolutionized the mushroom industry.

Previously, farmers had grown mushrooms using a manure spawn that was shaped into a brick and dried. Farmers broke off bits of the brick and planted them. The Sinden grain spawn, which used rye grain that had been colonized by mushroom fungus, could be sown like seed and covered a much wider area for growth. Sinden used rye because that grain worked better as a vehicle for the mushroom spawn.

"The grain spawn improved pro-

ductivity and it didn't take as long for the crop to grow. It also was much less costly than previous products," explains Dr. Paul Wuest, professor of plant pathology.

Sinden's patent brought in \$150,000 in royalties to the university. The money earned during the 17-year life of the patent was used to help form the Pennsylvania Research Corporation, which handled patents for Penn State faculty members.

"It was probably the most successful patent ever issued from Penn State," Wuest says.

Sinden also developed a synthetic compost in 1948 to replace the horse manure compost then in use and has identified fungicides to treat mushroom diseases.

The material Sinden donated to the university generally dates from 1923 to 1952. Such documents as research reports, written lectures, reprints of Sinden's articles from scholarly journals, photographs and even telegrams are included. A large percentage of the material is correspondence.

"Although he was working in the mushroom industry, he always

took a scholarly approach to research, and this correspondence to other scientists and mushroom growers is invaluable to get a historical perspective on the mushroom industry," Wuest says.

Although the information is accessible through Pattee Library at University Park, Sinden asked that the collection be stored in the mushroom spawn lab in 117 Buckhout Laboratory.

The monetary value of Sinden's gift is unknown, but the collection is a rich source of information for mushroom researchers, Wuest says. "There are references to mushroom pests, mushroom composts and other related topics that open the science of another era to today's researchers," Wuest adds.

The Sinden material helps document the modernization of the mushroom industry, illuminates the history of mycology, and records Penn State's ties to commercial agriculture. Sinden's gift, coupled with the papers of Leon Kneebone, Sinden's successor, gives the university a detailed record of Penn State's contributions to mushroom research.

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