

Elizabeth Hazen and Rachel Brown copatented one of the most widely acclaimed wonder drugs of the post-Second World War years.

Hazen and Brown's work was stimulated by the wartime need to find a cure for the fungus infections that afflicted many military personnel.

Scientists had been feverishly searching for an antibiotic toxic enough to kill the fungi but safe enough for human use, since, unfortunately, the new "wonder drugs" such as penicillin and streptomycin killed the very bacteria in the body that controlled the fungi.

It was to discover a fungicide without that double effect that Brown, of New York State's Department of Health Laboratories at Albany, and Hazen, senior microbiologist at the Department of Health in New York, began their long-distance collaboration.

Based upon Hazen's previous research at Columbia University, where she had built an impressive collection of fungus cultures, both were convinced that an antifungal organism already existed in certain soils.

They divided the work.

Hazen methodically screened and cultured scores of soil samples, which she then sent to her partner, who prepared extracts, isolated and purified active agents, and shipped them back to New York, where Hazen could study their biological properties.

On a 1948 vacation, Hazen fortuitously collected a clump of soil from the edge of W.B.

Nourse's cow pasture in Fauquier County, Virginia, that, when tested, revealed the presence of the microorganisms.

In farm owner Nourse's honor.

Hazen named it *Streptomyces noursei*, and within a year the two scientists knew that the properties of their substance distinguished it from previously described antibiotics.

After further research they eventually reduced their substance to a fine, yellow powder, which they first named "fungiciden.

" Then renamed "nystatin" (to honor the New York State laboratory) when they learned the previous name was already in use.

Of their major discovery, Brown said lightly that it simply illustrated "how unpredictable consequences can come from rather modest beginnings."