

The 1950 Epidemic of the Straw Itch Mite

J. J. DAVIS, Purdue University

The straw or grain itch mite is predaceous on the larvae of various insects, especially the Angoumois grain moth and wheat joint worm.

Some 40 years ago this mite (*Pediculoides ventricosus* Newp.) was a serious problem in the central west (Ohio, Indiana and Illinois) and especially in the southern half of these states. Since that time this mite gave little concern because of its scarcity. In 1950, beginning the latter part of August, reports began coming in from southern Indiana. Letters, telegrams and long distance telephone calls from farmers, county agents, physicians, and veterinarians gave evidence of the abundance and seriousness of this epidemic. For the most part the problem was one affecting humans, although there was evidence that some domestic animals were affected.

The problem at first concerned only farmers handling straw and grain. During the Indiana State Fair, the problem was emphasized because the boys sleeping in the 4H Club Building spread their bedding on straw-covered floors and soon were covered with conspicuous welts produced by the mites. Soon thereafter the infestation spread to straw board factories, the persons handling straw becoming infested and in some cases they walked off the job and refused to return.

The explanation of this epidemic of itch mites is simple. For the past few years surpluses of grain have been held over from one year to another and the mild winters in recent years has permitted successful over-wintering of the Angoumois grain moth. Also for one reason or another, the wheat joint worm has been increasing for the past three years. The increase in the abundance of the two principal hosts of the itch mite is sufficient evidence to explain why the straw itch mite has become a major problem.

It has been many years since a similar serious infestation of mites has occurred in Indiana and the explanation has been given, namely the increase of Angoumois grain moth and the wheat joint worm.

Doctors Scharnberg and Goldberger were among the first to study dermatitis produced by the straw itch mite and in 1909 (Public Health Reports, vol. 24, no. 28, July 9, 1909) published the first exact information we have relative to the itch mite epidemics. In 1910, F. M. Webster published the most complete account as Circular 118 of the U. S. Bureau of Entomology, under the title "A Predaceous Mite Proves Noxious to Man."

One of the earliest remedies suggested was bathing in warm soapy water, followed by applications of talcum powder. This recommendation still holds.

Other suggestions which we have made include a vanishing cream

ointment with $\frac{1}{2}$ per cent of high gamma benzene hexachloride (Kwell), sulphur ointment and dimethyl phtalate, the latter primarily as a repellent and preventive.

To protect workers in straw and grain products, any of the above products seem effective. It has also been suggested that bailed straw and straw for bedding, as well as grain, may be treated with dusting sulphur or benzene hexachloride dust as a preventive.