

51 high days was plus 1.43 per cent., and the average defect for 51 low days was minus 1.47. The same days, as already published four years ago, indicated on the average plus 0.51 and minus 0.42 per cent., respectively. Thus the days shown above normal by the new method of selecting times of equal atmospheric clearness had already been shown as above normal by the usual process, and vice versa. Of course the range as formerly published could not be so great, because the errors of observation could not be expected to fall the same in the two sets of data. Some days would be high and some low, not because of the sun's condition, but because the small observational errors helped to make them so.

Dr. Abbot's new method, he hopes, may be convincing of the sun's real variability. This will make all the more important and interesting his establishment under the joint auspices of the National Geographic Society and the Smithsonian Institution of a new solar observatory on Brukkaros Mountain in Southwest Africa. This site he selected last March after studying on the ground conditions in Algeria and Baluchistan. The mountain is 5200 feet high in a desert where the yearly rainfall averages only three and one half inches. Roads and construction are rapidly going ahead under the supervision of Mr. A. Dryden, inspector of public works for the government of Southwest Africa. The complex apparatus required has been prepared, and the expedition is expected to go forward about August 1 in care of W. H. Hoover, director, and F. A. Greeley, assistant.

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#### SCIENTISTS URGE HARVEST TIME WAR ON GRAIN INSECT PESTS

Immediate fumigation to rid the 1926 wheat, corn and other cereal crops of insect pests immediately upon harvesting is urged by Drs. E. A. Back and R. T. Cotton, entomologists of the U. S. Department of Agriculture, as a means of saving American farmers millions of dollars this year. Ignorance of control methods, it is claimed, costs farmers a large share of their profits each year by causing them to sell their newly harvested grain as soon as possible to avoid loss from insect attack. By treating it themselves at small cost they could hold their grain longer and realize later on good market returns.

"What the farmer or corporation with financial backing has found profitable the farmer with limited means will also find profitable," Dr. Back said. The Department of Agriculture has made a study of the various chemicals used as fumigants and recommends several as simple enough for use on farms, and harmless and effective if rules are followed. Among these are carbon bisulphide, carbon tetrachloride and a mixture of the latter with ethyl acetate.

Studies by Dr. Back and others have shown that nearly all cereal crops, except those of the far North, are more or less infested when the grain ripens in the fields at harvest time, and delay in getting the crop under cover where it can be treated gives the insects a chance to multiply and spread to the other kernels. Even a single day's delay is costly. Fumigation can destroy every insect in the bins, but this is done more easily immediately upon harvesting.

Although the idea that insects generate of themselves from the "germ of the grain" has long been exploded, many farmers and grain dealers still believe in this

virgin birth of insect pests, just as many people believe that fleas just naturally grow on dogs. Study has shown that the grain insects fly and are not at all partial to harvested grain in bins and granaries. The rice weevil and grain moth winter in the bins but spend the spring and summer in the sunny fields of green corn and wheat and lay eggs on the wheat heads and corn ears. It is really when the grain is still in the "milk stage", or just teething as it were, when the troublesome infestation really begins.

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#### "YES" LOSING HOLD IN AMERICAN SPEECH

There are too many substitutes for the word "Yes" in the English language, says Prof. Louise Pound of the University of Nebraska in a recent article in American Speech.

Foreigners and teachers of English remark concerning the lessening use in our American speech of the affirmative, "yes". It is still used in written discourse but it seems to be disappearing from oral speech. "Yes" is a compound of "yes-so," or perhaps of the old Anglo-Saxon "gea si", "yea be it". It was well established by the sixteenth century, alongside the historic affirmative "yea" and the competing "aye", which appeared in the last part of the century. "Yes" is now being replaced by a variety of forms.

A canvass of substitutes for "yes" in a room containing more than a hundred young people brought to light the following list as well as others of less interest. Substitutes like "all right", "you bet", "O. K", and the group of nasal expressions, "nh-nh", "uh-huh", etc., were not taken into account. All of the forms listed below were known to many persons among the hundred or more questioned. Those known to only a few individuals were not taken.

yeth	chahss	yap	chassm	ye-us
yum	chuss	yop	hya	ye-yess
yo	'es	yup	eye-ah	yeh
yaw	yair	yurp	yass	ye-ah
yezz	chow	yis	yahss	yessir
chess	yip	yuss	yazz	shassm
chass	yaw	yays	yahzz	yar

Mainly, these mutilated forms of "yes" are colloquial. But they are employed by many who seem never to use "yes" in its standard form.

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A kind of Indian corn is grown in Missouri because the large cobs make good corn cob pipes.

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