

*braziliensis* and is said to be very closely related to the wild cottontail of North America. Whether European species of *Lepus* and wild species of *Oryctolagus* would show a natural immunity to this virus is an interesting conjecture.

Our experiments are being continued and will be more fully reported at a later date.

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#### NOTE ON THE CORN COMPONENT OF A RACHITOGENIC DIET

IN working with white rats and rickets the authors have found irregularity in the development of rickets on the Steenbock Diet 2965. The trouble has been traced apparently to the yellow corn component of the diet, and a satisfactory remedy was derived from the following experiment.

Thirty pounds of whole grain market yellow corn were equally divided. One half was immediately placed in a loosely covered earthenware crock, and the other half ground finely before storage in a similar container. Each lot was held at the variable room temperature of a dry laboratory for one year. At the end of this period of time the whole grain corn was ground in the same machine previously used, and twin batches of the above diet were compounded from these two samples of ground corn. The difference, obviously, was that one batch of meal was freshly ground from old corn, while the other batch had been aged as meal. A third lot of diet mixture employed corn-meal bought at a grocery.

The three diet mixtures were fed to animals selected equally from three litters of rats, and on the twenty-fourth day all animals were diagnosed by X-ray and line test, with the following result.

No. of animals	Peculiarity of diet	Positive rickets	Ave. gain in weight
6	Freshly ground corn	none	27 grams
6	Aged ground corn	6	19 "
6	Market corn-meal	6	8 "

We do not find in the literature the caution that whole market corn may contain an amount of anti-rachitic factor sufficient to interfere with desired development of rickets in white rats, if the corn be used freshly ground, but only the notation that storage of ground corn is attended with loss of growth-promoting factor. Since it is desirable to retain the growth-promoting vitaminic power but is imperative to avoid excess of antirachitic factor, one seems to be between

the horns of a dilemma in respect to the corn component of this diet. A reasonable solution seems to be to store the ground corn-meal for six months and use it up in the next few months, and this procedure, for want of one more exact, serves as a successful expedient for insuring the development of a definite rachitic condition in white rats on a definite time schedule, with a simultaneous reasonable rate of gain in weight.

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#### WHEAT MOSAIC IN EGYPT

IN 1927-1929 the writer began investigations on a "new" wheat disease in Egypt for the Egyptian Ministry of Agriculture. It seems advisable to present a preliminary note at this time; later a complete paper will be published on various aspects of the problem. This disease was called to the writer's attention in December, 1927. The crop of 1928 was severely attacked. It was present to a somewhat less degree in the wheat crop of 1929 and has been reported to the writer as occurring in the crop of 1930.

In December, 1927, many completely yellow or chlorotic plants were sent to the mycology laboratory of the Giza agricultural farm. The same condition appeared on certain varieties of wheat in the varietal plots at Giza. The characteristic yellow color or chlorotic condition of the early stages of growth (when the plants were from one to two months of age) suggested the tentative names "yellows disease" or "wheat chlorosis," names by which it became known in Egypt. This condition was said never to have been seen on wheat in Egypt prior to 1927, and many explanations for its cause were forthcoming from staff members of the several divisions of the Ministry of Agriculture as well as from laymen.

Circumstantial evidence as well as established facts convince the writer that this malady had been present in Egypt for several years prior to the outbreak of 1928 but had escaped notice.

Diseased plants were scattered in a field and were not restricted to definite areas. There was no definite relation with respect to soil conditions. Normal plants were found next to a group of diseased individuals. The Hindi variety, one of the standard wheats of Egypt, was especially susceptible. Many fields were observed that had from 40 to 60 per cent. of the plants badly affected. The yield in these fields was reduced 20 to 40 per cent. Badly diseased plants were completely yellow or chlorotic in the early stages of growth and as the tillers began to form. The root