

nated with vaccine made up of scales and exudate ground together before being attenuated. Others were vaccinated with vaccine made by attenuating scales and exudate separately and mixing the two vaccines together before injection.

The best results were obtained in at least the seven flocks by the use of the vaccine made up of the scales and exudate ground together before being attenuated.

Data was not obtainable from any source as to the vaccination of very young chicks. Our experiments show that good results are obtained by vaccinating two- to eight week old chicks. Improving the size of disease after severe chilling twice with $\frac{1}{2}$ cc. of vaccine at intervals of three to four days.

Two cc. was injected in three of four very bad cases expected to die in a few hours. Cases recovered and cannot be related other than to total number in flock after expiration of seven months.

Strong tincture of iodine is recommended as the best disinfectant for use with this disease. The scales and exudate should be removed with a sterile pair of forceps and tincture of iodine applied to the exposed surface.



Manure piles should not be allowed unprotected about the henhouse. If they are when diphtheric roup is present in the plant they should be burned. This will give your neighbors some protection as well as your own.

The method of preparation of the vaccine is as follows: One half gramme of chicken pox scales and exudate (c. 100 cc. of physiological salt solution is the proportion used). The scales and exudate are first weighed out and ground in a sterile mortar with a small amount of the salt solution until pulverized. This material is poured in a flask, stoppered, placed in a water bath, and attenuated at a constant temperature of 55° C. for one hour. It is then filtered into a sterile flask or bottle and the remainder of the salt solution poured through the filter so as to wash out as much of the pulverized material as possible. It is very essential that the vaccine be used as soon after preparation as possible. Since no preservative is used it will deteriorate if allowed to stand. If old vaccine is used, poor results in the form of abscesses at the point of inoculation and the death of the fowl are to be expected.

For further detailed information we could refer our readers to Circular No. 115. By J. R. Bend, University of California, Berkeley, Cal. Bulletin No. 82. By Mack and Records, University of Nevada, Reno, Nevada. American Veterinary Review, Vol. XLIV., No. 3. Article by Hadley & Ben Madison, Wisconsin.

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