

water, too little fresh air and lack of sunlight are all important factors. Still others lay the blame to too heavy feeding of barley, lack of protein, a scanty supply of mineral matter, sows becoming too fat, and numerous other causes. Practically every hog raiser has had his own theory as to the actual causes of the losses, but when the ideas of these different men were brought together in an attempt to make their results of service to the beginner, it soon became evident that they differed so widely in their conclusions that the only safe method of procedure was elimination through careful experimentation. The Animal Husbandry Department of this institution, believing that the question had a direct bearing on the campaign for greater pork production, has been devoting considerable time and experimental space to this work.

Many experiments require years of careful repetition before results are of any considerable value. Certain phases of this work are far from settled at this time, but it is felt that many of the results are definite and can be put to immediate use by the practical breeder. We are prepared to go on record as to the suitability of frozen wheat in a ration for pregnant sows; the effects of excessive barley feeding; and as to whether lack of exercise, too little fresh air, and a total absence of sunlight will or will not result in hairless pigs. In outlining this experiment no attempt was made to select feeds that would make the most economical rations under existing conditions. It was deemed more important to begin at the bottom and determine whether feeds that are available on most prairie farms could be fed with safety to pregnant brood sows. Economical rations can be dealt with after the suitability of the different feeds is determined. However, all feed, both morning and evening, was carefully weighed so that we have definite figures as to the cost of the different rations.

#### Objects of the Experiment.

1. To determine the suitability of frozen wheat as a feed for pregnant sows.
2. Same for a ration consisting entirely of whole oats.
3. Same for a ration of straight barley, and barley supplemented with a protein rich feed.
4. Importance of sunlight, fresh air, and exercise.
5. Value of mineral matter in the ration.
6. Should brood sows be given constant access to water, or will good results follow eating snow.