

When the crop attacked is one in which the leaves constitute the edible portion, the use of arsenicals becomes dangerous. Contact insecticides are not practical. It has been found that the adult weevils at the time of their emergence in May and June may be controlled by a poisoned bran mash such as is used for cutworm bait, flavored with cull vegetables and scattered along the rows. At best, however, this is only a supplementary remedy.

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WALNUT Burl, a New Forest Product, Wanted for Cabinet Making

In the Southwest, a new forest product is being sold from the national forests and from private lands. It has been found that some specimens of nogal (*Juglans rupestris major*) and little walnut (*J. rupestris*) have wood in burls at and below the root collar that is valuable for the production of fancy veneers for cabinet purposes. These trees occur along the banks of streams in the canyons of central and southern New Mexico and Arizona. They do not form continuous stands, but are found as single individuals or clumps of trees in favorable localities.

Not all trees form valuable burls, so that it is necessary for the burl hunter to visit each tree and at times dig down beside the trunk to determine if valuable wood is present. Burl is indicated by a distinct swelling of the tree; a chip on this swelling indicates the grain of the burl.

The weight of burls varies greatly; occasionally a good one weighs up to 2 tons. The average in this region would be 700 to 900 pounds. The cost of locating, preparing, and hauling this material to the railroad from the rather inaccessible locations where it is found is considerable.

Walnut trees occupy what would otherwise be waste land. They grow relatively fast. Why some trees have burl and others do not is unknown. It if were possible to grow trees with burl, a good business could be developed in growing these trees.

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WATERMELONS Prove Valuable Source of Vitamins A and C

According to Government reports, during the year 1929 some 67,000,000 watermelons were produced and presumably consumed in the United States. In this age when we are continually faced with the problem of evaluation of all kinds of foodstuffs it was only natural that a fruit as plentiful as the watermelon should become the subject of investigation. Seemingly, it had occurred to no one that such a watery fruit would possess any value other than cool refreshment on a hot summer's day. Vitamins have been shown in abundance in many fruits and vegetables possessing a high water content, but no similar study had been made of the watermelon. For this reason, the Bureau of Home Economics conducted a series of experiments to test its vitamin content.

It is possible to determine the relative amounts of the vitamins present in a foodstuff by feeding the food in question to laboratory animals such as the rat and the guinea pig, and observing the rate of growth made by these animals. The melons used were of the Tom Watson variety and they were fed so as to determine the vitamin A, B, C, and G content. Vitamin G is one of the newer vitamins, and is essential for normal growth. Some investigators consider this vitamin to be identical with the pellagra-preventing factor.

In making the tests 125 rats and about 24 guinea pigs were fed daily, weighed portions of watermelon. The experiments were carried on from July through October, until it was no longer possible to obtain fresh melons on the Washington market. Only the edible portion was given to the test animals although other experiments indicated that guinea pigs preferred the green rind to the red flesh. The speed with which the portions of melon were consumed, even when fed in rather large quantities, left no doubt as to the extent the animals relished this test food.

In the case of the vitamin A and C tests the animals grew well and appeared healthy. However, when the watermelon was fed as a source of vitamin B or G, growth was not very pronounced and the animals appeared subnormal. The final summary of the data showed watermelons to be a good source of vitamins A and C and to contain small but detectable amounts of vitamins B and G.

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WHEATS from Many Countries Compared in Milling, Baking Tests

World production of wheat in 1928, excluding Russia and China, was 3,900,000,000 bushels. Grown as it is under a wide range of soil, climatic,

and topographical conditions, this wheat necessarily varies considerably in its adaptability to milling and baking purposes.

Recognizing the need for information as to the milling and baking properties of the wheat grown throughout the world as essential to economical marketing and utilization of the wheat grown in the United States, studies were made to compare the milling and baking properties of the wheat grown in other parts of the world with that grown in the United States.

In the United States five commercial classes of wheat are recognized: The hard red winter wheats grown largely in the South Central States; the soft red winter wheats grown mostly in the more humid Central and Eastern States; the hard red spring wheats grown extensively in the North Central region; the durum (spring) wheats grown in practically the same region as the hard red spring wheats; and the white wheats, both spring and winter, grown largely in the Pacific Western States, although some are found in New York and Michigan.

From the study made, it was apparent that wheats of the world are of the common type (*Triticum vulgare*) with very minor acreages devoted to other types. Wheat similar in character to the hard red spring wheats produced in the United States is grown in Australia, Bulgaria, Canada, Czechoslovakia, England, Estonia, Germany, Hungary, India, Japan, Latvia, Manchuria, Norway, Russia, Sweden, Switzerland, the Netherlands, the Union of South Africa, and Uruguay. The greatest quantity of hard red spring wheat is produced in Canada,