

In the Field of Agriculture

CROPS NOT AFFECTED BY MOON

Scientists are now convinced that the moon has no more influence on crops than it has upon the temperature or the amount of rain or the winds or any other weather element, says the United States department of agriculture. The growth of plants depends upon the amount of food in the soil and in the air than is available for them and upon temperature, light, and moisture. The moon obviously does not affect the character of the soil in any way, neither does it affect the composition of the atmosphere. The only remaining way in which it could influence plant growth, therefore is by its light. Recent experiments, however, show that full daylight is about 600,000 times brighter than full moonlight, yet when a plant gets 1-100th part of normal daylight it thrives little bet-

\$150 PER MONTH and EXPENSES
Salary of Commission-Introducing our King Butter Separator. Produces best grade of butter from cream or milk, sweet or sour, in less than 5 minutes. Retail \$5 up. Write for free sample and salary proposition. De King Mfg. Co., Dept. 290, Chicago, Ill.



\$40 a Week for Agents

The Acorn Selfheating Flat Iron takes women by storm—they simply can't resist. Selling almost as easy as giving away. Something entirely new. An entire week's ironing for a penny. Saves miles of walking and makes ironing day a pleasure. Carry it anywhere—iron anywhere, on a porch, under the shade trees. No stove needed. Everybody interested. Every home a prospect. Agents Make Money—men or women, quick, easy, sure. An all year's business; two sales a day will make you \$30 in a week—six sales per day easy. Don't wait—think of this profit—write for selling plans and samples. ACORN BRASS MFG. CO. Dept. 7, Chicago, Ill.

HEISKELL'S

One application soothes and heals a rough, pimply skin, and, when repeated, quickly effects a cure. Eczema, Erysipelas, Tetter, Ulcers and all skin diseases yield to its curative properties. 50c. a box. At all Druggists. Send for free sample and book, "Health and Beauty." JOHNSTON, HOLLOWAY & CO., 1728 Spring Garden St., Phila., Pa.

OINTMENT

STOP AGENTS Salesmen

Just Out—Brand new invention—splendid seller—Light Deflector for Auto Headlights. Puts lights on the road instead of in other people's eyes. Not a dimmer—increases driving light. Cuts out all the "glare." Needed—wanted on every machine. Simple. Easy to put on. No adjustments—no knobs to turn—lasts as long as the car. Fully Patented. Low in price—sells like lightning. LISTEN—you can make

\$45.00 to \$125.00 Weekly

Johnson, Ohio, cleared \$22 first day. Allen, Wash., made \$25.60 one afternoon. Hinkle, Wisc., "Best article I ever sold." Walker, Kans., writes, "Double my order and ship C.O.D." Gorman, Iowa, wires, "Ship gross quick, wiring money. Sold 19 today." Profit \$30.40. Hurry, get some of this money yourself. Wiley, Ga., reports 11 sales the first day. Millard, Ohio, says "Everybody wild over Deflector." This is your chance to make money. Don't hesitate a minute. No charge for territory—sales guaranteed—you can't help but make money. SEND NO MONEY—just write for full details. Address the Hickmeyer Deflector Co., 437 S. & B. Bldg., Toledo, Ohio.



Hurry! Write today for details.

ter than in absolute darkness. If 1-100th part of normal daylight is thus too little to stimulate a plant, it seems quite certain that a 600,000th part can not have any effect at all. It is therefore a mere waste of time to think about the moon in connection with the planting of crops. The moon, say the scientists, has nothing more to do with this than it has to do with the building of fences, the time for killing hogs, or any other of the innumerable things over which it was once supposed to exert a strong influence.

DISKING AHEAD OF THE PLOW

Disking land before plowing is one of the things which all farmers, but particularly those located on the high-priced corn-belt land, should practice. Some men have found it profitable to disk blue grass sod, but the practice has its greatest advantage when applied to stalk and stubble land.

The soil will absorb more water when it is disked before plowing. This has been a very important point in recent years when the soil has seldom been soaked with water. The more water stored in the soil, when the crops are put in, the larger will be the return if the season is dry. The thorough mixing of the stalks, stubble and other surface organic matter with the soil, which results from the disking, is very advantageous. On stalk land, particularly the weighted disk takes the place of the stalk cutter and this at the same time thoroughly mixes the organic matter with the soil. A disk may also be used to cut up green manure crops before turning them under and brings about a more thorough mixing of this organic matter with the soil. One of the fundamental principles in plowing any land is to thoroughly mix the stalks, grass or trash with the surface soil, and this is greatly favored by disking in advance of the plow.

Land with a pulverized surface can be turned with a plow in such a way as to give a much better seed bed than where the disking is not done. The land plows more easily and the pulverization is at the same time more thorough. The disk harrow is one of the most valuable of farm implements, and its use in advance of the plow is just as important as its use following the plow. — Missouri Experiment Station.

FLEA BEETLES INJURING VEGETABLES

Many complaints have come to the college of agriculture of the University of Nebraska in regard to the flea beetles that are eating the leaves of radish, cabbage, and other vegetables of this family at the present time. The beetles that seem to be doing most of the damage are the cabbage flea beetle, a small, shiny, bluish-black species, and another kind, known as the striped flea beetle, which has a small yellow stripe on each side of the back. When the beetles or the leaves on which they are working are touched, the insects jump away like fleas. They can be driven away from gardens by dusting with finely sifted ashes or air-slaked lime. To each pint of the finely sifted ashes or lime add one teaspoonful of kerosene or two finely crushed moth balls. Mix thoroughly and dust the mixture on the plants from a coffee can, the bottom of

which has been punched with many small holes. If one cares to handle poison, the insects can be got rid of on radishes or turnips by the use of Paris green, using one part Paris green to 10 parts flour or air-slaked lime. Mix thoroughly and place in a cloth sack. Shake the sack over the plants during the early morning, while the dew is still on the leaves.

WHY MILK AND BUTTER ARE SOMETIMES YELLOW

The belief that a bright yellow color in milk means richness in quality is not true. Experiments conducted at the college of agriculture of the University of Missouri show that the change from white cream and butter in winter to yellow cream and butter in spring and summer does not indicate an increased fat percentage. The very highest colored milk that a cow can give may have the lowest fat percentage. Such a condition is found in the so-called colostrum milk, the first milk that a cow gives after giving birth to a calf.

The explanation of the wide difference between the results of the experiments and the popular belief in regard to the relation of color to richness lies in the cause of the natural yellow color of cream and butter. It was found that cows were not able to produce the yellow coloring matter for their cream and butter. The coloring matter must be derived from the feed. The yellow coloring matter of milk was found to be identical with a yellow coloring matter that is widely distributed in plants and fresh grass.

This coloring matter is called carotin. It takes its name from the carrot, where it is very abundant, and where it was first discovered by scientists more than one hundred years ago.

The difference in the color of cream and butter in winter and spring was found to be due to the fact that the winter feeds contain little or no carotin. No marked increase in the fat percentage accompanies the increase in color when foods rich in carotin are fed. It has been shown that the average cow gives a higher per cent of fat in its milk during the winter than in the spring and summer.

OBSERVATION TOURS VALUABLE

A feature of the county agent work in Nebraska this year has been the agricultural observation tours taken in the respective counties for the purpose of focusing attention to some special method or practice of special value to local agricultural conditions, says the United States department of agriculture. Silo excursions were held in five of the counties, and they were followed with very excellent results. In western Nebraska, and especially in Dawes county, the number of silos has more than doubled following these observation tours. The growing of sweet clover and the value of alfalfa were also made objects of special excursions. As a result a great deal of sweet clover will be put in on sandy soils in Madison county, and the method of obtaining stands of alfalfa will also be followed out in all parts of that county and in other counties.

GREEN CABBAGE WORM

Several species of worms are feeding on cabbages, most common of which is the so-called green cabbage

worm, larvae of the white butterfly, says a writer in the Practical Farmer. In small patches they are often very annoying and destructive, yet controlled with comparative ease by prompt action. They readily submit to the free application of almost any dust-like material, such as insect powder, fresh lime, tobacco dust, wood ashes, road dust, etc., or of any poisonous or corrosive spray, like kerosene emulsion, hot water or hot soapsuds, whale oil soap, sprays containing arsenical poisons, etc. First point of importance is that worms are disposed of before they have had a chance to hide themselves inside of the folds of the leaves of the young head, especially around and near the stem or heart. For the home grower or small market gardener, an easy way is to carry a small (hand) powder gun loaded with some good insect powder, buhach being best, and to go over the patch occasionally, applying a puff or two into the heart of each plant. This quickly disposes of the worms.

CUTWORM CONTROL

Cutworms are the naked, greenish or dusky larvae of a number of species of dusky-winged moths that fly at night for the most part, says the New Mexico college of agriculture.

The usual life history is as follows: The eggs laid by the moths in late summer hatch into small caterpillars, or "cutworms," which lie concealed just beneath the surface of the ground near tender parts of plants. They feed mostly at night. Later cold weather and lack of food necessitate hibernation in the soil or under rubbish, weed piles, etc. In the spring, feeding is resumed again. The damage is more noticeable at that time for the cutworms are fair sized, hungry, and vegetation is scarce. After a time the caterpillars reach their full size, go into the soil to pupate, and later emerge as moths to lay more eggs for later generations. Alfalfa fields harbor enormous numbers of these cutworms.

Control: Many moths may be caught at night by placing a light above a tub of water. This will not reduce the number of cutworms much as the females do not fly far before laying the eggs. It will reduce the nuisance of having the moths in such large numbers about the house. Water standing 6 or 8 hours on an irrigated field should kill many of the cutworms in the soil. A reliable remedy is the poisoned bait made as follows: Mix 1 pound of Paris green with 25 pounds of dry bran. Add 2 or 3 quarts of molasses to 5 or 6 gallons of water and stir the mixture thoroughly into the poisoned bran. Let this stand for several hours before using. In infested fields scatter broadcast, in the evening, pieces of this bait the size of two or three fingers together. In gardens, stre... the pieces along the bases of the plants being attacked.

LARGEST FARMS MOST PROFITABLE

Results of the farm survey work conducted co-operatively in Gage county, Nebraska, by the United States department of agriculture and the Agricultural Extension service of the Nebraska University farm, show that of the 54 farms having their business analyzed, the 10 most profitable ones were almost three times larger than the 10 farms making the least returns. In spite of the common belief that the small farm is better and there is more opportunity to take care of the crops, secure better yields, and consequently make more money, the largest yields and the largest profits were found in the largest farms. The average labor income of the best 10 farms was \$1-