

Professor Lovett tells how Mosquitoes may be Controlled

Control Measures, Repellant Liquids and Remedies Described by O. A. C. Specialist.

Do you want to be bitten and tortured this year by mosquitoes? Would you not rather like to know of a certain mode of keeping them away? Of a cure or some alleviatory measure for their bites? If so, read carefully this article which Professor Lovett has written specially for the Home and Farm Magazine Section.

By A. LOVETT,
Specialist in Insect Pests at Oregon
Agricultural College.

FOR ages past humanity has endured the annoyance of mosquitoes, and according as their numbers were great or small they have been considered merely as a necessary nuisance prevalent at certain seasons of the year, or when in considerable numbers, as a serious pest, both to man and animals. The Northwest is fairly free from mosquito plagues. In limited areas at certain periods of the year, however, this obnoxious little offender, with its plaintive song and irritating bite, becomes a serious nuisance.

Our more prevalent species of mosquitoes breed in bodies of stagnant water. The little active "wrigglers" so common in watering troughs and storage tanks are mosquitoes in the making.

Control Measures.

Control Measures.—Where storage tanks of any sort are necessary they should be carefully screened. Tin cans, bottles and pans about the yard, in which water might collect, should be removed. The clogged roof gutter, the old disused well, or the sewer catch at the corner should receive attention.

All stagnant pools or low moist places should be drained or filled in.

Fish may sometimes be introduced into fishless pools or open cisterns. Top minnows, sunfish or stickle backs are very good. Gold fish feed voraciously on mosquito larvae.

The Use of Oil.—Where the abolition of the breeding place is not possible and the introduction of fish is not feasible, very often oil may be used to an advantage. This is applied to the water as a thin surface film. A low grade of kerosene is best. The heavier oils, such as crude oil, are worthless, because they collect in blotches on the surface and do not form a thin, even coating. One ounce of oil is sufficient for fifteen square feet of surface. It is best applied as a spray. One application is usually good for two weeks or more, but should be renewed whenever the film of oil fails to cover the surface of the water.

Protective Liquids.

Protective liquids for repelling the mosquitoes, consisting of spirits of camphor, oil of pennyroyal, oil of peppermint, etc., are recommended. A few drops on a bath towel suspended over the pillow or rubbed on the face and hands is supposed to repel the mosquitoes. A mixture recommended highly is composed of:

Essential oil of organes.....30 grains
Camphorated alcohol.....30 grains
Oil of cedar.....15 grains

Another preparation is: Castor oil, oil of lavender and alcohol equal parts.

No. 1. Camphor vapor. Burn over a small lamp in a shallow dish a ball of camphor one-half the size of a hen's egg. This vapour is an excellent repellent.

No. 2. Pyrethrum. Moisten powdered pyrethrum and mould into small cones about the size of a chocolate drop. Dry in the oven with slow heat. For use, place cone on a shallow dish or tray and light at the apex. One cone is sufficient for a room of ordinary size.

Remedies for Mosquito Bites.—Moist toilet soap rubbed over the puncture; ammonia or alcohol (applied externally) are said to relieve the irritation.

The strained juice of two lemons in an ordinary wash boiler or tub will make clothes "snow white."

"Dance of Light God" Fair Spectacle

Instrument at Panama Exposition Will Play Symphony on Clouds of Steam Visible 50 Miles.



Copyright, 1914, by Panama Pac. Int. Exposition Co., H. S. Crocker Co., Official Photographers.

Mr. D. D'A. Ryan, Whose Lighting Scheme Will Bring Out the Colors of the Facades and Courts as if by Day

ONE of the most spectacular features of the illumination of the Panama-Pacific International Exposition will be a huge aurora of colored lights spreading from a gigantic scintillator before the Exposition grounds on San Francisco harbor. The scintillator will consist of a battery of forty-eight thirty-six inch searchlight projectors fitted with colored screens. Nearby will be placed a huge steam engine, which, instead of moving, will generate steam. At night the scintillator will play "The Dance of the Light God" upon clouds of steam and smoke generated by the engine or from bombs bursting in the heavens. Colored shafts of light will be visible fifty miles.

Danger From Copper in Celery Less

THE TABLE CELERY which has been coming into the market recently shows a distinct improvement over last year's in its comparative freedom from copper, according to reports received by the United States Department of Agriculture. Copper on celery is found in the form of dried Bordeaux mixture (lime and copper sulphate) which is used extensively to prevent the destruction of the crop by blight. The use of salts of copper in food products has been pronounced by the referee board injurious to the health, (but on the other hand, it has been found practically impossible to bring celery to market in good condition unless the plants have been sprayed at certain periods of growth with Bordeaux mixture.

To meet this difficulty the Department of Agriculture issued a warning to growers last year, prescribing the method of spraying and urging housewives to be particularly careful in washing all celery before using it. The effect of this warning is now becoming apparent, for the celery is reaching the market in better condition than in the past.

In investigating the question the department discovered that the presence of copper was due to faulty spraying apparatus, usually the employment of knapsack sprayers instead of power outfits. These do not operate at a sufficiently high pressure to make a fine spray or mist. As a result the Bordeaux mixture is applied in a number of fine streams and these, instead of merely settling on the leaves, as a mist would do, run down between the stalks. Thus the mixture accumulates at the base of the plant and is not washed out by the rain. This sometimes gives a blue-green appearance to

the celery, which many people imagine to be due to Paris green; as a matter of fact the green tint is that of a copper stained lime.

When spraying is done properly an efficient apparatus is used, working under high pressure—a hundred pounds or more. Spraying is stopped when the leaves are covered with fine drops and before these begin to run down the stalks and accumulate at the base of the plant. The leaves, it is pointed out, should not be eaten under any circumstances.

However careful the grower may be in his spraying, the consumer must also do his part. The bunches of celery should be broken open and the stalks washed and scrubbed thoroughly before they are eaten. This, chemical analysis shows, will remove nearly all of the copper found in dried Bordeaux mixture from the stalks and eliminate danger of any bad effects to the consumer.

\$40,000 Condensery to Be Built.

Ferndale now has John B. Agen's signature to the effect that the Mount Vernon Cream Company will construct a factory here for the purpose of condensing and sterilizing milk. The contract signed reads that the construction of the condensery will be started within 90 days from the date of the contract, or before June 2. The condensery plant will cost not less than \$40,000 and the building will likely be concrete. In the near future a can factory may be added to the plant, according to W. M. Bickey of the Mount Vernon Cream Company, who was in Ferndale on Tuesday looking over the Slater site, on which the company holds an option and where the plant will be erected.

THE OAKS

Portland's Great Amusement Park

Performances Free every afternoon and night at 2 and 8, rain or shine, in the new Open-Air Amphitheater.

Visit THE OAKS Amusement Park during the Rose Festival

Festival Week

Tuesday, June 9
\$10,000 Display of
Fireworks
at 9 P. M.

Thursday, June 11
Rose Festival
Ball

Saturday, June 13
\$10,000 Display of
Fireworks
at 9 P. M.

You must be at THE OAKS for these great occasions. The opportunity of a lifetime.

Admission to Park 10c

Cars at First and Alder

Launches Morrison Bridge

Didn't Look It.

The Youth (just returned from his holiday)—Oh, I'm a great believer in holidays. One comes back so fit. Brain clear, appearance improved, and altogether more wideawake. The Maid—And when shall you take your holiday?

On Account.

It was on a Broadway car. A passenger stooped and picked up a coin from the floor. Three of the other passengers eyed him with envy.

He said: "Which of you people dropped a five dollar gold piece?" "I did!" yelled each of the three. "Well," said the finder to the man nearest him, "here's a nickel of it."

Going Some.

"Does your wife make your money go far?" "I judge so. None of it has ever come back that I know of."

"There's nothing in a life of crime." "Didn't you fellows get nothing in that house?"

"All we got was a mince pie and we had to split that four ways."