BOX HEDGES BEING DESTROYED BY PEST

Everyone who owns a box tree should look out for the boxwood leaf miner. If they do not it is likely to get such a hold on the box trees and hedges as to destroy their beauty almost entirely at the end of a few years.

The pest, which has an oxtensive range and is now spreading rapidly in the vicinity of Washington, is a small orange fly that emerges about the first of May. It alights on the underside of the box leaf and deposits its eggs in the inside of the leaf where the larvae hatch out and live, boring from within, so to speak, throughout the year until the following spring. The gradual destruction of the leaves not only detracts from the appearance of the shrub but saps its vitality so that it falls an easy prey to several other pests and parasites.

William Middleton of the U. S. Bureau of Entomology says if all the hedges and box trees that are infected, as well as those near them, were sprayed according to Department of Agriculture directions the pest could probably be stamped out in about three years. A mixture of nicotine sulphate with molasses and water is advocated, to be applied the last week in April, just before the miner emerges from the pupal state within the leaf. The sticky molasses as flypaper to entangle the insect's wings as it comes out and the nicotine acts as poison. The spraying should be repeated about five times at intervals of four or five days. The first of May is the normal time of emergence, but it may vary with weather conditions as the season is advanced or retarded.

Leaves that are attacked by this insect can be recognized by yellow or brown discolorations and by a mine or area of loose leaf skin on the underside of the leaf within which small yellow maggots or orange pupae are present.

BEGINNING OF SPRING

No matter what the weather was in the last few weaks, spring did not begin until March 21 at 4.02 Eastern Standard Time when the sun crossed the equator on its trip northward and entered the zodiacal sign of Aries, the ram. Then spring officially commenced.

Actually, the sun does not move among the stars, but they form the background against which we earth-dwellers see it, and so as the earth revolves around the sun in its orbit, the sun itself apparently moves among the constellations. To the ancients, who were astrologers more than astronomers, and used the study of the heavens to attempt to predict the future, the star groups among which the sun thus seemed to move had an influence on the people of the earth when it was in them.

Though now astrology is thoroughly discredited as a science, some of the ancient terms still survive, and so the sun is said to enter the sign of Aries when spring commences, as happened early in the morning of March 21. It was then in the same position as it was in the early times when it entered the constellation of Aries, but as a matter of fact it is in the constellation of Pisces, the fishes,

for the constellations of the zodiac, the narrow path in which the sun seems to move, are slowly changing their position, returning again to their old positions after an interval of 25,800 years.

BLUE VITRIOL USED FOR BURNS

Blue vitriol, whose most common use is to supply the poisonous element in many spray mixtures for fruit trees, is now employed medicinally to treat phosphorous burns.

Burns caused by phosphorous are very painful and slow to heal because the cellular elements of the tissues with which the phosphorous comes in contact are destroyed, followed by the formation of ulcers and sores. Experiments conducted at the Medical Research Laboratory at Edgewood Arsenal show that 1 to 3 per cent. of copper sulphate, otherwise known as blue vitriol, applied to a burn of this character will form a coating over the phosphorous ingrained in the tissues and render its removal easy. When the copper sulphate coated phosphorous has been removed the wound is washed out and treated as any other burn.

SUBSTITUTE FOR QUININE IS SOUGHT

The monopoly of the quinine market held by the Netherlands must be broken, say the health experts of the League of Nations. At present the most effective remedy against malaria is quinine made from the cinchona bark grown in the Dutch East Indies, which furnish nine-tenths of the world's supply. Cinchona bark from the other countries which supply the remaining tenth gives only 2 to 5 per cent. quinine while that from Java, the principal source, runs 5 to 7 per cent.

The production of quinine in the Netherlands possessions is in the hands of a syndicate which fixes the price on the Amsterdam market. A return of 36 per cent. is paid on the capital invested. There is an independent Japanese company but the competition that it affords is not for the present appreciable. Requests for the government to regulate the actions of the "quinine ring" have met with the reply that the quinine interests are merely safeguarding the legitimate rights of the industry.

The health officials of the League are concentrating their attention on the development of a suitable substitute for quinine. Cinchonine, a drug made from a combination of several cinchona barks from trees growing elsewhere than in the East Indies, is under consideration as such a substitute. If it is found that it can be made as efficient as quinine, an effort to break the monopoly will be made by encouraging the cultivation of cinchona trees in all parts of the world where they will grow.
