

varieties of *Prunus serrulata* are proving to be much more reliable test plants for these viruses. When sweet or sour cherry buds having the latent virus complex as it occurs in Oregon are budded into these flowering cherries, a severe reaction occurs.

Kwanzan budded in August with sweet cherry buds containing virus, instead of producing normal growth the following spring, develops small curled leaves with split necrotic veins, which form tight rosettes with very little or no stem elongation. Small nursery trees may be killed, or may produce new growth only below the point of bud insertion. Often the sweet-cherry bud grows and develops in a normal manner and may be the only living branch on the trunk.

Buds from the same source placed into Shirofugen produce an entirely different reaction. If the buds are inserted in August, the area immediately around the bud becomes necrotic and the bud and budding rubber become embedded in a mass of black gum by fall. By spring the stem is completely girdled for 5 or 6 inches, but the foliage and new growth develop in the normal manner. About the time the first leaves have expanded to full size, entire spurs of foliage near the canker suddenly turn brown and die with the leaves still attached. This may gradually spread up one side of the branch or may move on all sides of the branch. As soon as the weather becomes warmer and drier, the entire branch beyond the point of bud insertion suddenly dies. Many of the branches now break over at the point of bud insertion, because this area has become much constricted. The necrosis spreads slowly down from the point of bud insertion and out into the laterals, causing cracking, constrictions and gumming, especially on the new or current-season lateral branches.

When Shirofugen is budded after growth starts in the spring, a similar reaction takes place. Necrosis occurs about the bud insertion and eventually girdles the stem. By fall the canker extends 2 or 3 inches each way from the point of bud insertion, but no symptoms appear on the foliage, until suddenly the entire branch dies. The stem is constricted below the canker, and gum is forced out in tendrils over the necrotic area.

Buds have been taken from several different trees of Bing, Lambert, Royal Ann, Black Republican, Black Tartarian and Montmorency sour cherry and placed on Kwanzan and Shirofugen. Of all the trees tested, only one tree of Bing and one tree of Black Tartarian have failed to give a positive test on these two flowering cherries. Preliminary tests with these two sweet cherry trees have also given negative tests for virus on Elberta peach and Mahaleb seedling. A much more extensive test is now under way to determine if these two trees are free from all known virus.

It is hoped that by testing enough trees one virus-free tree of each of the standard commercial varieties may be found that will serve as a foundation for future nursery stock.

There is some indication that some peach varieties may also carry a somewhat different latent virus that produces a local canker effect on Shirofugen.

A more complete paper on the above subject is being prepared.

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PENICILLIN SODIUM TREATMENT OF EXPERIMENTAL TRYPANOSOMIASIS OF MICE

THE following preliminary report offers the results of the experiences carried out in order to test sodium penicillin¹ against *Trypanosoma cruzi*.

Two groups of six mice each, weighing about 25 grams each one, were inoculated 33 and 16 days prior to the treatment with the same strain of *Trypanosoma cruzi* kept in our institute by successive passages through dogs.

The total individual dose administered was of 250,000 and 500,000 Oxford units per kilogram to 4 mice of each group. The infection in the 2 untreated mice served as control. The calculated individual dose of sodium salt of penicillin in 0.1 or 0.2 cc of saline solution was given intramuscularly five times daily at 3-hour intervals and twice at night with a 6-hour interval. The entire therapy covered a period of 84 hours.

Parasite observations were made 24 hours after the initial dose and every two days afterwards, for 10 days. The results of the therapy were negatives; both the treated and the untreated mice showed practically the same amounts of trypanosomes in the blood during the treatment and thereafter.

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A NEW QUARRY FOR JURASSIC DINOSAURS

A LARGE deposit of well-preserved dinosaur bones, heretofore undescribed, occurs in the Morrison formation, about 8 miles east of Cleveland, Emery County, Utah. The date and circumstances of original discovery are unknown, but the first systematic investigations were carried out by parties of University of Utah students, who obtained much excellent material. In 1938 the writer brought this deposit to the attention of Dr. G. L. Jepsen, professor of vertebrate

¹ The sodium penicillin was kindly supplied by Winthrop Products, Inc., through the courtesy of Laboratorios Winthrop Ltda., Chile.