together, therefore the possibility of all three taking part in the origin of the abnormalities cannot be ruled out.

Recently, Darlington[2] has recalled the work of Salaman and Le Pelley[3], who found the potato King Edward when grafted on to other varieties produces disease, and it seems probable that the Lord Lambourne abnormalities are of the same kind. These cases differ, however, in one respect. For in the potato, King Edward introduces something into the varieties with which it is grafted which is deleterious to them, whereas in the apple it is Lord Lambourne which alone has, so far, suffered from combinations with different varieties or stocks.

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Dec. 18.

[1] Crane, M. B., *The Grower*, **22**, 53 (1944).
[2] Darlington, C. D., *Nature*, **154**, 166 (1944).
[3] Salaman, R. N., and Le Pelley, R. H., *Proc. Roy. Soc.*, B, **106**, 140 (1930).

Fluorescence in Ultra-Violet Light as a Test for the Presence of Leaf Roll Virus in Potato Tubers

ON reading an article in the *School Science Review*[1], I recently became interested in the use of ultra-violet light as a possible means of detecting the virus responsible for potato leaf roll in the tubers of the plant.

Tubers were collected (including 'setts' where possible) from leaf rolled plants during late July and early August, and at the same time tubers were taken from healthy plants of the same varieties. After being cleaned they were examined under ultra-violet light from a 230 v. 125 amp. 3-pin base bulb fitted with a Wood's glass filter supplied, through Mr. Brennan, representative of the General Electric Co. in Belfast. Since no fluorescence was observed from the entire tubers—they assumed a light mauve colour, with the 'eyes' showing up as white areas—they were then cut transversely. The cut surfaces of the tubers from the leaf rolled plants then displayed varying amounts of fluorescence. This fluorescence was most marked in the 'setts', where it appeared to extend throughout the medulla (pith), but was more limited in its distribution in tubers of the present season's growth, where it appeared to be confined to the vascular bundles.

In comparison, cut tubers from healthy plants showed a much lighter colour on the cut surfaces than on the 'skin', but there was no sign of fluorescence—merely a lighter shade of the mauve colour referred to above.

Although the number of tubers examined was small, there appears to be every possibility that this test could be used with some degree of certainty in diagnosing the presence of the leaf roll virus in potato tubers, and the test has the advantage of being rapid. The cutting of the tubers can be carried out near the 'heel' end, and damage to the buds in the 'eyes' easily avoided.

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[1] Campbell, D. A., *School Sci. Rev.*, **25**, 278.

Wood-boring Insects in Beech Furniture

IN Mr. A. L. Howard's recent article[1] on "The Beech Tree" it is stated that "beech has been a favourite wood with chair-makers for 200 years and perhaps more. The higher class makers . . . generally used beech for the frame. . . . Many fine specimens of artistic design and clever craftsmanship have been lost, as the beech framework used was attacked by the *Lyctus* or *Xestobium* beetles, or both, the framework rapidly turning to dust, and the chairs breaking up."

Records of infestation of timbers by these insects have, however, shown that neither normally occurs in beech furniture. *Lyctus* powder-post beetles (family Lyctidæ) attack partly and recently seasoned sapwood of certain hardwoods such as oak, ash, elm, walnut, in which the vessel diameter is sufficient to accommodate the ovipositor of the female and in which the starch content of the wood is adequate for the nutrition of the larvæ. Neither of these conditions is fully fulfilled by beech, which is not liable to infestation by these insects.

Beech is not immune to attack by *Xestobium rufovillosum*, the death-watch beetle (family Anobiidæ); but this insect rarely occurs in furniture, although well known for its powers of destruction in roofing and other structural timbers, chiefly oak, when conditions are favourable for its development.

There are two insects, both belonging to the family Anobiidæ, which sometimes do cause serious damage to beech timber: the common furniture beetle (*Anobium punctatum*), the most frequent cause of 'worm' in old furniture, not only of beech but also of many other woods, including walnut; and, less commonly, *Ptilinus pectinicornis*, which also occurs in sycamore and willow. Of these, the common furniture beetle is by far the more important, and in the course of repairs to valuable furniture such as that mentioned by Mr. Howard, the use of a suitable preservative treatment for woods susceptible to attack by this insect is advisable to prevent a recurrence of the trouble.

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Nov. 14.

[1] *Nature*, **154**, 492 (1944).

Newton and His Portraits

I WRITE with reference to the note in *Nature* of January 13, on portraits of Newton. We have in this College a portrait of Newton painted by Henry Cooke in 1669, the year in which he became Lucasian professor. Newton was a benefactor of St. Catharine's College, lending money to erect the new buildings at that period, a loan which he later made a gift. We have no record of the circumstances in which the portrait was painted, but it shows him as a young man in a red gown with the open neck typical of his later portrait by Kneller.

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