

dition of the soil, failure to rotate crops where clean cultivation is not followed, lack of proper trimming, failure to control injurious insects, fungus diseases, etc., or that there is insufficient plant food available. Orchards are sometimes seen, however, in which all these external conditions have been carefully attended to, the trees are thrifty, and still the fruit lacks color and quality. This condition involves a chemical problem and usually indicates, as proved in numerous instances, that the supply of available potash is insufficient for the tree's needs—a lack which must be supplied by rendering available the unavailable potash already in the soil, or by the application of further material in an available form.

Another important problem arises at this point, that is, the relation, if any, which exists between diseases of various kinds to which the apple tree or its fruit is subject and the conditions, as related to the soil, under which the trees are grown. Mr. G. H. Powell, of the U. S. Department of Agriculture, stated in an address to the Western New York Horticultural Society, in 1903, that 'at the present time we would say that the practical control of the scald is primarily an orchard problem and depends on cultural conditions that develop the best and most highly colored fruit.'³ This being the case, it appears that this malady may be avoided, in some measure at least, by selecting soils which, with other things equal, tend to produce 'the best and most highly colored fruit.' It thus seems possible, and indeed probable, that soils in themselves may have a most direct influence upon the character of the tree growth and fruit growth which shall the better enable these to resist certain forces of disease besides the scald.

That the highest quality of fruit should be obtained on a soil which produces a tree neither stunted nor too rank in growth, but normal, well developed and hardy, and consequently productive of fruit the most attractive in appearance, is a natural inference. Sufficient proof of this point, however, is not at

³ See Proceedings of the 48th Annual Meeting of the Western New York Horticultural Society, 1903.

present available, but a field of investigation is opened which will become steadily more important as the already noticeable demand for a higher quality of apples increases.

HENRY J. WILDER.

A CORRECTION OF THE GENERIC NAME (DINOCHÆRUS) GIVEN TO CERTAIN FOSSIL REMAINS FROM THE LOUP FORK MIOCENE OF NEBRASKA.

WHILE in the field during the past summer (1905) the writer sent to Dr. W. J. Holland (director, Carnegie Museum) a preliminary note on certain fossil remains of the family Suidæ from the Loup Fork Miocene of Sioux County, Nebraska. I proposed *Dinohyus hollandi* as the name and asked Dr. Holland if he would kindly look to see if that generic name was preoccupied before publishing the note. In reply Dr. Holland wrote me that *Dinochærus* 'appears to be a better word,' and that it was not preoccupied. I agreed to the change, but find that the name *Dinochærus* has been used by Gloger, for a South African hog (*Hand- und Hilfsbuch Naturgeschichte*, I., pp. xxxii, 131, 1841), and, therefore, propose my original name *Dinohyus hollandi* for the fossil remains, which was published in SCIENCE, N. S., Vol. XXII., No. 555, pp. 211-212, August 18, 1905.

O. A. PETERSON.

CARNEGIE MUSEUM,
October 24, 1905.

QUOTATIONS.

ACADEMIC FREEDOM IN JAPAN.

PROFESSOR TOMIZU, most eminent of Japanese authorities on Roman law and professor in the Imperial University, Tokio, has lost his chair, arbitrarily removed by the minister of education, owing to his passionate denunciation of the ministry for the terms which it authorized Japan's representatives at Portsmouth to accept. He is one of a group of seven professors in the university who have been critical of the ministry ever since the war with Russia began.

Professor Tomizu's eminence together with the radical nature of the government's con-