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A NOTE ON THE OCCURRENCE OF D-MANNITOL IN THE NATIVE PERSIMMON

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The literature records very little work on the constituents of the native persimmon, **Diospyros Virginiana L.** The Japanese persimmon, **D. kaki L.**, has received more attention. In 1929 Matoe Iwata (1) noted the presence of **D-mannitol** in that fruit.

For the present investigation about sixteen kilograms of ripe fruit was used. After the addition of an equal volume of water the mixture was allowed to ferment, and then the pulp partly separated through cheesecloth. Distillation of the liquor yielded the equivalent of 284 ml. 100% alcohol. The undistilled liquor was filtered to remove the remainder of the pulp, and the distillation continued. The distillate which came off at 100° C. was acid to litmus. A Declaux determination showed the acid constituent to be acetic. The liquid in the distilling flask developed a deep red color and as it became concentrated a chocolate-brown material separated. The heating was interrupted from time to time to filter off this material. Finally the precipitation of this substance ceased and a colorless crystalline precipitate appeared. The concentration was continued, with occasional removal of the crystalline product, until the residue was a dark brown viscous material having an acid reaction. The crystals were readily purified by recrystallization from hot 50% alcohol. They agreed in melting point with the value for mannitol (166° C.) and gave the tests described for that substance by Mullikan. The yield was about 150 grams purified product, or almost 1%.

Mannitol was the only constituent positively identified. The chocolate colored insoluble product is possibly a phlobaphene resulting from the tannin in the fruit. This behavior is characteristic of one class of tannins.

(1) Bull. Inst. Phys-Chem. Research (Tokyo) 8, 220-2 (1929); Chem. Abs. 23, 3520 (1929).