bark, twigs, leaves, etc., I found in this quantity of the drift, by actual count, 1,583 seeds and fruits of more than 55 species of plants. These are without exception substances which have been found in the stomachs of birds. What a rich variety of food there is in the drift heaps, and what a truly enormous quantity there must be in the cast-up material which lines the shores of all of our waters. Besides the vegetable matter there were also several insect pupæ and a few living chrysomelids and weevils.

The following seeds and fruits were contained in a half pint of drift collected along Northwest Branch, Montgomery County, Md., March 19, 1905: Tulip-tree (262), pigweed (199), purslane (145), cowbane (124), elderberry (108), witch grass, etc. (98), oats (75), black mustard (74), common ragweed (51), sedges of genus *Carex* (44), buttonweed (39), pale persicaria (38), *Polygonum* spp. (35), lamb's quarters (31), spotted spurge (31), blackberry (28), great ragweed (21), green foxtail (18), yellow sorrel (18), beaked rush (17), yard grass (17), white ash, (12), mountain laurel (10), rice cut-grass (9), pokeweed (8), sedges beside *Carex* (8), black bindweed (7), Pennsylvania persicaria (6), aster (5), alternate-leaved dogwood (4), basswood (4), tubers of sedge (4), wild turnip (3), cockspur grass (3), broad-leaved dock (3), kinnikinnik (3), water oak (3), summer grape (3), green ash (2), touch-me-not (2), broad-leaved arrowhead (2), poison ivy (2), *Paspalum* sp. (2), water plantain (2), cocklebur (2), nightshade (2), corn cockle (1), bloodroot (1), scarlet sumac (1), spiderwort (1), beggar's ticks (1), mulberry (1), pine (1), spatterdock (1), sourgum (1).

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AN UNDESCRIBED ALTERNARIA AFFECTING THE APPLE.

An apparently undescribed species of *Alternaria* was found on a single specimen of apple a year ago while the writer was investigating apple rots at the Michigan Agricultural Experiment Station. On coming to this place the same fungus was found to be one of the most common causes of rot in apples in the state of Colorado. Professor W. Paddock, of the Colorado Experiment Station, had already done some work with this fungus.

The disease manifests itself by attacking the blossom end of the fruit, causing a decayed area of a very dark brown color. This area may remain quite small or it may gradually enlarge until the whole fruit is involved, after which the decayed specimens dry down to a shrivelled, hard mass. The fungus appears to affect different varieties to an unequal degree, some apple growers having reported that it is almost impossible to secure ripe fruit of certain kinds because of the attacks of this disease. In other cases it has been found associated with a blackened condition of the seed cavity in ripe fruit, the carpels being much discolored on the inner side. This condition may also be accompanied by a kind of core rot due to the invasion of the flesh around the carpels by the fungus.

Inoculation experiments are being carried on with a view to determine other possible hosts, as well as the characteristic effects of the fungus on the apple.

The fungus is apparently carried through the winter on portions of the flowers and fruit that were attacked by the fungus during the preceding season and which are still attached to the trees. Reports indicate that the fungus can be readily held in check by spraying with Bordeaux mixture.

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January 18, 1905.

ON THE USE IN SURGERY OF TENDONS OF THE ARDEIDÆ AND GRUIDÆ.

The subject of sutures and ligatures and their proper sterilization and use has long been an important subject in the realm of modern surgery. Various materials have from time to time been recommended, many to drop by the wayside, and we find even in the materials of the present day, namely, catgut, kangaroo tendon, silk, silkworm gut, horse hair and silver wire, great difference of opinion in the minds of surgeons as to their use.