

of names and their identification are given below in the hope that the list may be made permanently useful.

Agli = the garlic.

Avellani = the filbert.

Castagne = the chestnut.

Cipolli = the onion.

Coriandrum sativum = the coriander.

Fave = the bean.

Fave a meta = bean remains in fecal matter.

Fichi e uya pressa = figs and pressed grapes.

Fichi secchie a coppie = dried figs in pairs.

Fiori di melo grande = flowers of large apples.

Frammenta di pigna = fragments of pine cone, seeds included.

Garubbe = the carob.

Grano o orzo mondato = grain freed of its hull, or covering.

Hordeum hexastichum = 6-rowed barley.

Hordeum tetrastichum = 4-rowed barley.

Lenticchi = the lentil, the pulse.

Mandorle = the almond.

Miglio = the millet.

Noci = the walnut.

Pere = the pear.

We see by an inspection of this list that the residents of Pompeii used as vegetables the onion, the garlic, the bean and the lentil, while the barley (of two kinds), the millet and the chestnut were probably ground to make bread. The fresh fruits of the table were the grape, the fig, the apple and the pear. As edible nuts, the Pompeiians used filberts, chestnuts, pine seeds, walnuts and almonds, while the dried fruit comprised the fig, the carob and the grape. This is evidently only a partial list of plants actually used in Pompeii, for, as in all large cities, the vegetables and fruits sold in the markets vary with the season and the above list represents the plants on sale during late August, the date of the destruction being August 24, 79.

JOHN W. HARSHBERGER

UNIVERSITY OF PENNSYLVANIA

NOTES ON A NEMATODE IN WHEAT

DURING the season of 1909, a nematode in wheat has made its appearance in different parts of the United States. It was found by members of the Office of Grain Investigations at Modesto, Cal., May 28, 1909, and authentic

reports of its presence have since been received from Georgia, West Virginia and New York.

~ Affected wheat heads are similar in appearance to "bunted" heads. The glumes of the spikelets spread somewhat and galls, dark in color and full of nematode larvæ, occupy the places where the kernels should be. The nematode is undoubtedly *Tylenchus tritici* Roffr., and has been known in Europe since 1745. Its life history is described by Davaine in *Comptes Rendus Acad. Sc. Paris*, Part 41, 1855, pp. 435-438 and Part 43, 1856, pp. 148-152. The European literature on the subject is extensive, but no American citations of its occurrence in the United States are known to the writer. Sorauer in his "Handbuch der Pflanzenkrankheiten," Teil III., gives a good account of the parasite and mentions it as occurring in Sweden, Holland, Germany, Austria-Hungary, Switzerland, Italy, North America and Australia (?). Dr. E. A. Bessey in a letter of June 19, 1909, says that he has observed related forms on species of *Agropyron*, *Elymus*, *Calamagrostis*, *Trisetum*, *Chaetochloa*, *Agrostis* and *Sporobolus* from various parts of the United States, but has not observed any form attacking wheat. The parasite has already gained headway in fields around Old Field, W. Va., and may prove a serious pest.

Infested wheat should be cleaned thoroughly before sowing. Dr. N. A. Cobb recommends cleaning by winnowing, sieving or skimming off the floating galls after the seed-grain has been submerged in water. Dr. E. A. Bessey suggests the probable efficiency of hot-water treatments such as are used for smut, and also mentions a treatment consisting of steeping seed in a two to five per cent. sulphuric-acid solution for one half to two hours. Sorauer, l. c., recommends soaking infested seed in dilute sulphuric acid (1 kg. sulphuric acid to 150 l. water) for twenty-four hours. Further experiments are necessary before acid and hot-water treatments can be safely recommended.

EDW. C. JOHNSON

U. S. DEPARTMENT OF AGRICULTURE