

This note does not question the validity of Pearl's theses as presented in the second paragraph but it does suggest that the evidence, particularly Figs. 55 and 56, is inconclusive and ambiguous. These curves do show that there is general downward trend in the death rate regardless of the state of public sanitation, but it is questionable if they do show the relative unimportance of sanitary measures in lowering the death-rate in these particular cases.

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TWO MEDITERRANEAN CLOVERS NEW TO THE UNITED STATES

AMONG the specimens received for identification at the Bureau of Plant Industry during the past year are two Mediterranean species of clover, neither of which seems to have been recorded previously from the United States. In view of the possibility of their establishment as weeds in this country, it seems well to place on record the place and date of their first appearance here.

The first species, *Trifolium hirtum* All., is a native of the Mediterranean region and northern Africa. A series of specimens of this species, collected at Farmville, Virginia, on May 15, 1922, has been forwarded by Mr. P. W. Fattig. Mr. Fattig writes that he first found it growing in an old lot which had been cultivated a few years ago, and that a negro who is now cultivating the lot informed him that the clover had been there for about ten years. A few plants were also found by Mr. Fattig growing along fences or in paths at distances of twenty rods, eighty or a hundred rods, and half a mile from the spot where he first noticed it.

The second species, *Trifolium angustifolium* L., occurs also in the Mediterranean region of Europe, Asia Minor and Africa, as well as in the Azores and the Canary Islands. Specimens of this species, collected in a field of California bur clover in Montgomery County, Alabama, in June or July, 1922, were sent for identification by Professor Wright A. Gardner, of the Alabama Polytechnic Institute. Professor Gardner has since written that the seed from which the crop was grown was obtained from the Sherman Grain and Seed Co., Sherman, Texas, and that he has been told that the same clover has appeared in other plantings of seed from the same source, although he has no

definite information as to how widely the plant is distributed in Alabama.

Trifolium hirtum is an annual, suggesting the ordinary red clover, *T. pratense*, in its general appearance and pubescence, but smaller. The leaflets are obovate, 1 to 2 cm. long and 6 to 15 mm. wide, broadly rounded, subtruncate, or obscurely notched at apex, finely denticulate, and rather densely pilose on both sides. The sessile, involucre heads are subglobose or oval, about 1 to 2 cm. long and 1.5 to 1.8 cm. thick (excluding the corollas). The purple-red corollas have a narrow elongate banner. The sessile, turbinate, densely silky-pilose calyx tube is 20-nerved and about 3 mm. long, and the setaceous-subulate teeth are plumose and about 5 mm. long. In fresh specimens the hairs of the calyx are whitish, but in old herbarium specimens they change to brown.

Trifolium angustifolium is also a pubescent annual, reaching a height of one or two feet. Its leaflets are linear or very narrowly linear-lanceolate, 2 to 5.5 cm. long and 2 to 4 mm. wide. The pedunculate, exinvolucrate heads are at first ovoid or oval, becoming at maturity cylindric and reaching a length of 2.5 to 8 cm., with a diameter (exclusive of corollas) of 1.8 to 2 cm. The corollas are "rosy." The sessile, obconic, 10-nerved calyx is about 4 mm. long, and is rather densely hirsute-pilose, while the plumose, setaceous or setaceous-subulate teeth are 4 to 7 mm. long. As in *T. hirtum*, the pubescence of the calyx is white at first, changing to brown or bronze in old herbarium material.

Specimens of both species have been deposited in the United States National Herbarium, the Gray Herbarium, the herbarium of the New York Botanical Garden and the herbarium of Professor L. H. Bailey.

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"THE FRIENDLY ARCTIC"

IN the issue of SCIENCE of March 30, 1923, there appeared two letters—one by Mr. V. Stefansson and the other by Messrs. McConnell and Noice, in which the statement is made that the minister of mines declined to investigate charges made by certain members of the Canadian Arctic Expedition against Mr. Stefansson and the