Buisman[5] described a species of Phomopsis causing a canker on elm trees in Holland. As a result of cultural comparisons with cultures loaned through the courtesy of Dr. Buisman it appears that the organism isolated by her corresponds for the most part with that of the present study.

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A NEW BACTERIAL DISEASE OF PEARS

IN the course of an investigation on the green fluorescent bacterial plant pathogenes, a very pathogenic organism belonging to this group was obtained from a plate given me by Mr. K. G. Parker who was at the time isolating *Erwinia amylovora*. The isolation was made from colonies with green pigments in the medium, appearing as a contamination. The presence of such green fluorescent organisms in isolation work is not an unusual occurrence. Frequently they are discarded as saprophytes, in some cases with good reasons. Their presence is usually given no significance because of their ubiquitous nature in plants, seeds, water and soil.

There is practically no information as to the relation these organisms have to economic plants. There is, however, an increasing realization that some of them are plant pathogenes. The organism here described is such an example and has not heretofore been known.

SYMPTOMS OF THE DISEASE

The manifestation of blight on flowers, which turn dark brown and die, is very apparent. On matured leaves, black round spots are produced, while on young leaves similar spots have a yellow "halo" and the leaves often become distorted. Black, almost circular spots are produced on young and mature fruits, but more readily on the latter.

PATHOGENICITY

Artificial inoculations on fruits, flowers, leaves and stems of a hybrid pear, *Pyrus communis* × *serotina*, clearly established the pathogenic nature of the organism. Cross inoculations revealed a wide range of hosts. Infection was obtained on *Vigna sinensis, Phaseolus vulgaris, Purearia hirsuta, Vicia faba* and *Syringa vulgaris*.

A study of the organism showed it to be a *Pseudomonas*, but a comparison with the descriptions of the known species of these bacterial plant pathogenes found on pear, *Pseudomonas barkeri* and *Pseudomonas nectarophila*, showed no identity. Its fluorescigenic character is readily observed in a medium consisting of 0.3 gm $MgSO_4$, 2 gm K_2HPO_4 and 3 gm asparagine per liter, adjusted to about pH 6.9. It is closely related to *Pseudomonas syringae, Pseudomonas vignae* and *Pseudomonas viridiflava*, but distinctly not identical to any of these species. The organism is named and briefly described.

Pseudomonas utiformica sp. nov.

Motile by one to two polar flagella; rods with rounded ends; 0.7–1.5 x 1.3–3.1 μ, occurring singly and in pairs; no spores; no capsules; gram-negative; not acid-fast; facultative anaerobe; green fluorescent; beef-extract agar colonies round or fimbriate, grayish white to slightly greenish; nutrient broth fairly turbid in 24 hours; gelatine liquefied; milk not curdled, alkaline; nitrate not reduced or weakly reduced; ammonia produced; H_2S and indol not produced; dextrose, galactose, levulose, mannose, arabinose, xylose, sucrose, raffinose, manitol, glycerol, and salicin are fermented; no fermentation in rhamnose, maltose, lactose; starch and cellulose not digested; growth in malic, citric, succinic, formic, and lactic acids; no growth in tartaric acid.

Pathogenic on: *Pyrus communis* × *serotina, Vigna sinensis, Phaseolus vulgaris, Pueraria hirsuta, Vicia faba, Beta vulgaris, Syringa vulgaris, Prunus avium.*

The genus *Pseudomonas* is used according to Bergey's definition and as proposed by Burkholder. If the S. A. B. committee's recommendation for plant pathogenes is adopted the genus should be *Phytomonas*.

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THE PRODUCTION OF MUCIFICATION OF THE VAGINAL EPITHELIUM OF RODENTS BY THE OESTROUS HORMONE

THE production of vaginal mucification by *corpus luteum* extracts which maintain pregnancy in overiectomized pregnant animals, as described in a recent article in SCIENCE by Harris and Newman,[1] is, we believe, not a test for progestin but a test for the small amount of oestrin which the extracts used by them undoubtedly contain. In 1928, one of us, (R. K. M.) with Hisaw and Weichert,[2] described the production of a similar reaction in the rat with *corpus luteum* extracts. Shortly after, in 1929, the other, (W. M. A.) with Corner,[3] described the produc-

[5] J. Westerdijk and C. Buisman, "De iepenziekte rapport over het onderzoek verricht op verzoek can de Nederlandsch heidemaatschappij." pp. 56–62, 1929.

[1] R. G. Harris and D. M. Newman, "A Practical Test for Potency of Extracts of *Corpora Lutea*." SCIENCE, 74, 182, 1931.

[2] F. L. Hisaw, R. K. Meyer and C. K. Weichert, "Inhibition of Ovulation and Associated Histological Changes." *Proc. Soc. Ex. Biol. Med.*, 25, 754, 1928.

[3] G. W. Corner and W. M. Allen, "Physiology of the *Corpus Luteum*. II. Production of a Special Uterine Reaction (Progestational Proliferation) by Extracts of the *Corpus Luteum*." *Am. Jour. Physiol*, 88, 326, 1929.