Both growing and stored corms become infected through even slight wounds but the fungus seems unable to penetrate the uninjured epidermis of corms.

Technical Description: Penicillium gladioli n. sp.

When grown at 20–24° C. on gladiolus corms or on favorable media such as Czapek's solution agar, or potato dextrose agar, the conidiophores are 50 μ to 2 mm. long by 2 to 3.6 μ in diameter; penicillus consisting of the main axis of the conidiophore with or without one or two branches, bearing few metulae 10–12 μ long and verticils of few sterigmata 12 to 14 by 1.5 to 2 μ with tapering rather than acute points, and conidia elliptical-fusiform, smooth, hyaline, 2.8 to 3.6 by 2.5 to 3 μ, adhering in long chains. When grown at 10 to 16° C. the conidiophores tend to be longer and coarser, with walls pitted or roughened, often forming conspicuous tufts, fascicles or complex branching coremia.

The sclerotia are 140 to 540 μ in diameter; cream to light pinkish tan, in age becoming pale brown or tan; smooth and composed of thick-walled cells 8 to 12 μ in diameter; retaining their vitality for several months.

On Czapek's agar the reverse color of the fungus growth is light pinkish cinnamon; drops of pale orange yellow fluid are more or less conspicuous on the mycelium; odor none.

The fungus described above has been identified from corms grown in such widely separated regions as Holland, New Mexico, Canada, Kansas and New York.

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UNDULANT FEVER IN AMERICA

IN 1906 Craig[1] reported the first case of Malta (Undulant) fever originating in the United States. At the close of his paper he states: "(1) The probability of much wider distribution of Malta fever, even in temperate climates, than is generally supposed, and therefore the great importance of applying the serum test in all undetermined cases of fever in all regions. (2) That there are no pathognomonic symptoms of Malta fever. All the symptoms presented may occur in many other infections, and the cases are very few in which a diagnosis can be made without the aid of the serum reaction." The increasing number of cases reported since that time shows that Craig's prediction was correct.

The observation that the causal organism of Malta fever (*Alcaligenes melitensis*) and contagious abortion (*Alcaligenes abortus*) in cattle are closely related in their cultural, biochemic, serologic and pathogenic characteristics was reported by Miss Evans[2] and has been confirmed by numerous investigators. In addition to goats and cattle, hogs and horses are known to harbor the microorganisms.[3]

Of 35 strains studied by Miss Evans[3] 33 were of the abortus or melitensis A varieties. One strain which did not conform to the two common varieties is serologically closely related to paramelitensis of Négre and Raynoud.[4] These authors designated as paramelitensis in their morphologic, cultural and biochemic features, but failed to agglutinate or agglutinated slightly in melitensis serum. Absorption of agglutinins by paramelitensis from melitensis serum was only partial.

The writer has recently isolated a microorganism from the blood of a patient ill with a wave-like type of fever of long duration; with swelling and painful joints and sweats. Blood examination showed secondary anaemia, leucopenia and a marked increase in the percentage of the lymphocytes.

This microorganism was culturally, morphologically and biochemically melitensis, but it agglutinated in melitensis serum in the lower dilutions only, and it did not absorb very much of the agglutinins from the serum. Spontaneous agglutination in salt solution was marked. Perhaps this variety of melitensis is more widely spread than was formerly believed.

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ARE SALT SOLUTIONS MUSICAL?

TESTS in our laboratory with magnesium sulphate, salt, ammonium chloride and sugar convinced us that the change in pitch described by Dr. C. D. Spivak (SCIENCE, October 21, 1927) is due almost entirely to a change in volume of the solution with a consequent change in the length of the resonant column in our closed tube (air column over liquid in tumbler, beaker or graduate). Thus when magnesium sulphate is added to water the first increase in volume is equal to that of the dry magnesium sulphate; but as solution progresses, the volume of solution plus solid diminishes with a corresponding change in pitch. Solids on the bottom of the container produce a deadening of sound. The addition of sand deadened the sound and caused a change in pitch equal to that caused by the addition of an equal volume of water.

I wonder if Dr. Spivak has taken these points into

[1] Craig, Chas. F., *Internat. Clinics*, 15 ser., 4, 115, 1906.

[2] Evans, Alice C., *Jour. Inf. Dis.*, 22, 580, 1918.

[3] Evans, Alice C., *Hygienic Lab. Bull.* no. 143, 1925.

[4] Négre, L. and Raynaud, M., *Compt. rend. Soc. de biol.* Paris, 72, 791, 1912.