

'Pasmo' Disease on Wild Flax, *Linum angustifolium*

THE summer of 1944 was outstanding in Ireland with regard to the severity of flax diseases. Both *Phoma* and rust (*Melampsora Lini*) were widespread and virulent, the first mentioned being particularly bad on crops raised from home-saved seed.

During an examination of some species of wild flax as to their probable role in the perpetuation of common flax diseases, a pycnidial fungus was found on the leaves and stems of *Linum angustifolium*; and, on incubating affected material, horn-like tendrils of four-celled spores were extruded from the pycnidia. Morphologically, the causal organism agreed with published descriptions of *Sphaerella linorum*, the cause of 'Pasmo' disease of flax. Using spore suspensions, cross-inoculations on seedlings of *Linum usitatissimum* showed that the disease went over readily to the ordinary flax. Lesions and typical pycnidia containing three septate spores soon developed, and the symptoms on the host here corresponded closely with those described for 'Pasmo' disease. The plants of *L. angustifolium* on which the disease was originally found came from a farm in one of the southern counties. Flax has been cultivated both on this farm and in its vicinity for a number of years, and seed of foreign origin frequently used.

Colhoun and Muskett¹ issued a warning note in *Nature* as to the danger of introducing 'Pasmo' disease into these islands. Although not yet recorded on ordinary flax in Ireland, it is probable that a close inspection of the crop will show this disease to be present. In any event, the indications are that not only has the disease been introduced in the past but also that it has already become established on a native weed. In this connexion it is interesting to note that in New Zealand the 'Pasmo' disease soon after its introduction established itself on *Linum marginale* (an introduced weed), and the disease was afterwards more abundant on this plant than on neighbouring crops of cultivated flax².

Incidentally, it may be mentioned that the seedling blight fungus *Colletotrichum linicola* was also found on plants of *L. angustifolium*, and here again cross-inoculations showed the fungus to go over readily to cultivated flax.

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¹ Colhoun, J., and Muskett, A. E., *Nature*, **151**, 223 (1943).

² Newhook, F. J., *New Zealand J. Sci. Tech.*, A, **24**, 102 (1942). (Abst. Rev. *Appl. Mycol.*, **23**, 17 (1944).)

cause of wilt disease of flax in America and recorded as occurring in Ireland by Pethybridge and Lafferty² in 1920, has not previously been reported in Great Britain.

F. culmorum (W. G. Sm.) Sacc. has also been found closely associated with *F. Lini* on flax seed. Rost³ claims that *F. culmorum* causes a foot and root rot of flax and up to 100 per cent loss in germination under adverse weather conditions. In view of this statement further work is in progress on the pathogenicity of this species alone and in combination with *F. Lini*.

The two species of *Fusarium* mentioned above were identified by Dr. W. L. Gordon of the Dominion Rust Research Laboratory, Canada, to whom they were sent through the Imperial Mycological Institute, Kew, and I gratefully acknowledge this assistance.

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¹ Bolley, H. L., Proc. 22nd Ann. Meet. Soc. Promotion Agric. Sci., 1 (1901).

² Pethybridge, G. H., and Lafferty, H. A., *Irish J. Agric.*, **20**, 325 (1920).

³ Rost, H., *Angew. Bot.*, **20**, (6), 412 (1938).

Stridulations in the South African Egg-eating Snake, *Daspeltis scaber*, Linn.

MANY strange vocal sounds have been attributed to snakes, but none substantiated. At this Snake Park I have listened carefully both during the day and night, at all seasons and particularly at mating periods, and have never heard any sound other than a hiss. Just recently, however, I observed stridulation in an egg-eater, and have since confirmed this in other specimens.

Normally, the egg-eater is a quite docile snake and can be handled with impunity. An occasional specimen, however, can be easily irritated, when it will throw its body into a series of horseshoe-shaped coils with the head in the centre. By doing this, the scales of any two opposing portions of the body point in opposite directions. The snake writhes its body in such a manner that new coils are continually added on the inside of the horseshoe; at the same time the body is slightly inflated to act as a resonator. In the process of writhing, the tips of the scales rub against each other and produce a rasping sound which is amplified by the inflation of the body. This sound is very similar to a hiss and can easily be mistaken for it. Each spasm of writhing is kept up for only 15-20 sec., and during this time the snake opens its mouth and strikes.

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Wilt Disease of Flax in Great Britain

FOR the last three seasons a serious disease has occurred in some experimental plots at Aberystwyth in which oil varieties of flax, *Linum usitatissimum* L., have been grown. *Fusarium Lini* Bolley (*F. oxysporum* Schlecht form *lini* (Bolley) Snyder and Hansen) has been repeatedly isolated from the stems, roots and seeds of the diseased flax plants. This species, first described by Bolley¹ in 1901 as the

Meaning and Scope of Social Anthropology

PROF. A. R. RADCLIFFE-BROWN's article in *Nature* of August 26 has just come to my notice, and I hasten, regrettably late I fear, to write to point out that his able exposition of meaning and scope of anthropology does scant justice to Prof. F. C. Bartlett,