This should be worked on the average of the transformed egg counts for each sheep; the statistical method appropriate to this set of data is that of 'fitting constants'. Detailed criticism here would serve no useful purpose. One might, however, suggest that the analysis set out above would be illuminated by a table showing the size of the main effects and a graph showing trends during the twelve weeks of the observations. These were not given in the original paper.

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Fruiting of *Coprinus lagopus* in Pure Culture

AN isolate of *Coprinus lagopus* from a compost of barley straw was observed to produce sporophores on slants of cellulose agar. The medium consisted of 5 gm. filter paper (Whatman No. 1) treated according to Scales¹ and incorporated in the following:

NaNO ₃	1.0 gm.	H ₂ O	500 ml.
KH ₂ PO ₄	0.5 gm.	Agar	7.5 gm.
KCl	0.25 gm.	FeSO ₄	0.005 gm.
MgSO ₄	0.25 gm.		

Incubation was at 25° C.

Since agar is known to supply growth substances², an attempt has been made to discover some conditions for fruiting in liquid media.

Strips of filter paper were half-immersed in 20 ml. of a solution of the mineral salt constituents of the cellulose agar. After sterilization, the filter paper was inoculated with *C. lagopus* above the level of the liquid, and the tubes incubated at 25° C. Growth was feeble, and after prolonged incubation there was no development of sporophores.

Fruiting of the fungus on the straw of the compost suggested that this material supplied a necessary factor for the process. An extract was prepared by steaming 50 gm. of straw in 500 ml. of water for 1 hr. After being filtered and autoclaved, the extract was incorporated in the solution supplied to the fungus with the filter paper, so that the original mineral salt concentration was maintained.

Development of the mycelium under these conditions was rapid, and after eight days incubation at 25° C. fruiting bodies began to appear. By the seventeenth day the first sporophore in each tube had deliquesced and was fully mature.

It would appear that the extract supplies some factor essential for fruiting of *C. lagopus* under these conditions. An attempt to determine the nature of this factor is now in progress, and details of the work will be published in due course.

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Dispersal of Antherozoids in *Fegatella*

IN *Fegatella conica* (Conocephalum) the antherozoids are vigorously dispersed by ejection into the air, and mites, usually considered to be the agents of transmission, probably play little if any part, at least in this member of the Marchantiales. This conclusion is the result of a chance observation made while attending to locally collected material of male plants of *F. conica* which had been transplanted into pans, and had dried considerably during a hot week-end. When watered, a fine mist arose; little attention was paid to this, until it was noticed that the mist was being emitted from the antheridial heads in regular puffs. Removal into direct sunlight increased the activity, and the particles which were being ejected were visible to the naked eye, so that the puffs were obviously composed of distinct granules.

Petri dishes inverted over the material were soon spattered with small droplets, which were found under the microscope to contain numerous coiled antherozoids, many of which were seen to uncoil and swim away in the film of moisture. Repeated collections of droplets were all identifiable as swarms of antherozoids, and it was realized that this explosive method was probably the means of transporting the antherozoids from the sessile antheridial heads

to the stalked archegonial heads. Measurements showed that the ejection force was sufficient to perform this function, as antherozoids were thrown 10-15 cm. into the air when undisturbed by lateral air currents. In unscreened plants, however, air currents caused lateral diffusion, so that puffs were much less distinct, indicating that this phenomenon might easily be overlooked in the field.

Plants were photographed on 16-mm. ciné film, and by careful screening frequent ejection from antheridia were recorded. Further observations showed that: (a) temperature was the stimulus to ejection; (b) light itself has no obvious effect; (c) moisture is a necessary condition for ejection; (d) mechanical stimulus can produce weak activity (probably the role taken by mites); (e) ejection of complete antheridia occurs.

It is hoped to deal with further observations on such points as these in a more detailed account to be published later.

Antherozoids being vigorously ejected into the air in a jet from a male head ($\times 6$)

(From film by F. Ryan)