

University of Aberdeen
28th January 1888.

Dear Sir

Accept my very sincere thanks
for your much esteemed letter of the
24th January. I trust that I may be
permitted to make use of your expres-
sions of your opinion of my mycological
work in my present candidature.

I regret if I have seemed to undervalue
your mycological Classification, or to over-
look the very great difficulties insepar-
able from the discovery of a thoroughly
Natural System, & from the representa-

tion of every system due to the necessity
of placing in a series organisms that
display affinities to several (or even to
many) others.

Your works are well known ^{to me} & their great
merits are highly esteemed by me, & I re-
cognise with gratitude the stimulus that
you have given to the progress of
mycology. But to form a perfectly natu-
-ral classification it would be necessary
to possess a full knowledge of the
life-history of all the fungi, or at least
of representatives of ~~them~~ all the groups.
Can it be claimed that we have yet
such knowledge, or that it can be

looked for for some time to come? Again,
is there reason to believe that the
Sphaeropsidaceae & *Melanconiaceae* are auto-
-nomous fungi? Is it not almost certain
that they are but stages in the life history
of ~~the~~ fungi included among Ascomycetes,
perhaps other groups? But of how many
of them do we know the true relationships?
Among the Hyphomycetes are there not
undoubted cases where the same mycelium
produces conidia of various forms (just
as in Pucciniae), ~~which~~ which receive different
names, & would be placed under different
groups if the spores alone were accepted
as the basis of classification?
Assuredly in the Cryptogams, as in the
Phanerogams, the organs of reproduction

are of the chief importance in classification, as being less liable to vary than the organs of vegetation. But there is no one organ that it is safe to rely wholly upon, as you recognise in your families (Lophiostomaceae, &c.). A parallel example will help to explain my meaning more fully. The seed in Phanerogams is even more suited to be the basis of a classification than is the spore in Cryptogams, & we know that it is largely employed in the Natural System, yet only as one of several characters. A classification based upon seeds alone would not be

natural in the true sense of the word,
but would conjoin plants widely different
and would separate others nearly
allied. Yet the seed gives far more
important ^{results} ~~again~~ in classification
than the characters relied upon in
the Linnæan system, where number
of parts was regarded as of prime importance,
yet even thus several natural groups
(Tetradynamia e.g.) were marked out.
It is certain that "fungus in statu
typico et perfecte maturus observandus,"
~~yet~~ is a true maxim; yet does that
not exclude from our study the

Hyphomycetes & other great groups of
"Fungi imperfecti", if rigidly enforced?
A certain limit of freedom must be per-
mitted to the discretion of the observer in
studying such groups.

But in the Ascomycetes when one exam-
ines spores assuredly mature & healthy
how often does one find differences in
the spores in a single ascus, not only
in size & form, but also in colour & in
presence or absence & in number of dividing
septa. For example. Dothidea tetraspora
has usually bilocular spores, yet one
very frequently finds quite mature
unicellular spores. So it is a fre

quent occurrence to find those of some
Leptosphaeriae in part provided with
longitudinal as well as transverse ^{septa}.
It is often difficult to determine whether
a fungus should fall under your
Phragmosporae or Scolecosporae, or again
whether ~~the~~ it is to be referred to Hyalo
phragmiae or Phaeophragmiae; & the same
difficulty meets us in other groups.
The preponderance of any, (save a truly
natural & therefore scarcely attainable)
system is a source of danger in rendering
botanists so content with what has been
given that they dread any change,
& investigation is stifled. The Linnæan
system, a priceless boon when first

given to botanists, became an incubus when blindly followed by the pupils of Linnaeus & transmitted to their pupils in turn, but without the spirit of the great master.

I welcome your system as a boon to mycologists; but I dread what might be the effect ~~when~~ were it to be accepted as final when your spirit had died out of the time is not yet come that will permit of the discovery of the truly perfect system of classification of Fungi. My reason for using "sporidia" in preference to "spore" was as stated, but I have no deep objection to use the latter word for uniformity.

With sincere respect

yours most faithfully

James W. H. Trail.