No. 10. The polyporoid types of Junghuhn preserved at Leiden. Letter No. 37.

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Junghuhn was among the first to name foreign species of fungi. He made large collections in Java and published a paper that was finely illustrated, in 1839. If all of his types were destroyed many of his species would still live, for he gave good accounts of them and good figures of many of them. All of the figures that he cites were not published as it was his intention to continue the work, and he numbered his paper "Fasc. 1," but no further paper were issued by him on the subject. Dr. Goethart assures me that the originals of Junghuhn's figures are not preserved in the museum at Leiden.

However, there are at *Leiden* colored drawings of a large number of Javanese fungi, and they are the best I have ever seen of tropical fungi. The name of the author of these icones has been lost, but I think I have found evidence to trace them to ZIPPELIUS. Most of them are named as new species and it was evidently the intention to publish them, and it is unfortunate that they were not published as they were mostly "new species" at that time. Many of them have been named since. I hope to have more to say as to these icones in a future letter.

JUNGHUHN'S specimens are mostly preserved, and of the thirtythree species that he named I found the types of twenty-seven. The remaining six have probably been misplaced in covers where they do not belong, or his labels for the specimens have been lost. There is no trouble in identifying Junghuhn's types for he labeled each in his peculiar writing.

For many years under the old directors the mycological specimens were neglected in the museum at *Leiden*, and many specimens were loose in drawers or put away in packages. When I first visited the museum it was not possible to work with any excepting those that were in the herbarium covers. A few years ago Dr. Jongmans had the loose specimens all placed in boxes and numbered and the number that I cite refers to these boxes.

When Junghuhn wrote on fungi several of the Polyporoid genera had not acquired definite meaning and it is a curious occurrence perhaps that of the six species of Favolus, Daedalea, Laschia and Merulius that Junghuhn named, not one of them would to-day be placed in the genus where Junghuhn placed them. I will give here a short summary of the types of Junghuhn that I have been able to locate and the box or cover where they may be found. It was quite a task to hunt them out among the several hundred boxes of fungi from Java now in the museum. Junghuhn's types have a unique value that many other type specimens do not posses, for while Berkeley, Montagne, Fries, Léveille and many of the old namers of fungi distributed co-types to other museums, I have never noted any of Junghuhn's specimens except at the museum at Leiden.

affinis (as Merulius). Type in Hirneola cover. It is Hirneola delica which was originally published by Fries as Laschia delica.

annulatus. Type not found by me, but Junghuhn gave such a good illustration that there is no question as to the species. I collected it in Samoa.

asper. Good types in *Polyporus* cover. Good specimens also in Zollinger's set No. 2080. It is a *Trametes*, in the same section as *Trametes hydnoides*.

bicolor. Type in cover, also several collections in boxes. It seems to be a frequent plant in the East, marked with a brown spot that appears at the base of the pileus. Berkeley called it *Polyporus anebus*, and Murrill discovered only recently that it was a new species."

byssogena. Type in Box 107.* It is large pored, white Poria. It was published as byssogena but Junghuhn labeled his specimen byssoseda.

cervino-gilvus. Type in cover. Beautifully illustrated by Junghuhn. Unfortunately it is the same as dermatodes which I believe is prior. cucullata (as Merulius). Type in Laschia cover. This is a little Laschia, as some now class it, with a venose hymenium exactly as shown in the unpublished Icones No. 37 and named "Polyphleps chloroleucus," unquestionably I think the same species.

crustacea (as Laschia). Type in Box 6.* When Junghuhn published Laschia as a new genus he was not aware that Fries had used the same name as a fungus genus. Of the two species that Junghuhn includes, the first (crustacea) is a Poria and the second (spathulata) is a Farolus. Léveillé stated that there were no grounds for basing a genus on Laschia crustacea and on his statement the species was compiled in Saccardo as Poria crustacea (Vol. 6, p. 333). Montagne and Berkeley took the genus Laschia to apply to the resupinate species with long, superficial pores, and as the name Laschia was preoccupied, it was changed to Hymenogramme and Laschia crustacea is also entered in Saccardo (Vol. 5, p. 652) under the genus Hymenogramme. Whether te genus Hymenogramme in the sense of Berkeley and Montagne can be maintained or not is another question, but I think this species at any rate should go in Poria.

durus. Type in cover, also in Box 114.* This is quite a distinct species with dark, atropurpureus context. It was named also cartilagineus (type at Kew) and Testudo (type at British Museum) by Berkeley.

flavus. Types in Boxes 82* and 109.* A common species in the tropics. For me it is a *Polystictus*, which Junghuhn beautifully figured and I think he should be given the credit for the species. As I have published I doubt if it is the same, as has been stated, as *Irpex flavus* of Klotzsch which was from te arctic regions.

floccosus. Type in cover and in Box 35.* This is the Eastern analogue of the American plant called *Polystictus rigens*. It has the same context and pores but the surface is different.

fusco-albus (changed to Junghuhnii because it is a duplicate name). I did not find the type.

furcatus. No type found by me.

indecorus. Type in Polyporus cover. It is a Trametes form of Polystictus Persoonii.

indica. (Daedalea). Type in Box 117. It is in very bad condition, eaten by insects, but I think is the common Lenzites repanda of the tropics which has so many other names.

lacerus (Why changed to *lacer* in Saccardo?). Type in cover also in Box 77.* It was published as *lacerus* but Junghuhn wrote his label *lacerus* which no doubt was as intended. The plant is the

same as dilatatus (bis) of Berkeley, which Cooke changed to Adami. macrotrema. The type is (in error) in Persoon's Box No. 42. The name was changed, without Junghuhn's consent or authority, to Molkenboeri by Léveillé. (Cfr. Syn. Hexagonas, p. 30). It is a white Hexagona.

microscopicus No type found by me.

miniatus. Type in cover. Also a figure in the unpublished Icones. In my opinion it is a thin form of *Polyporus sulphureus*.

Mons veneris. Type in Box 176.* It is the same species as leoninus as named by Klotzsch, better known as funalis, a quite common species in the East.

niveus. Type in *Polyporus* cover. It is undeterminable, a white *Poria* or more probably the resupinate portion of some *Polyporus*.

obovatus. Only a small fragment remains of the type in Box 20.* I judge it is the same plant as rasipes of Berkeley and very close to laceratus but not the same.

pellucida. Type in Box 21. I believe this is a rare species. The hymenium is rose color and is pubescent under a lens. The microscope shows the slender hairs hyaline and slightly incrusted. The pores are large and shallow. For me it is a *Polystictus* in the same section as *dermatodes*. It does not appear to me to be pellucid.

pustulosns (as Favolus). No types found by me and the figure cited was not published. From the description it is evidently a Laschia and probably the same as Holtermann figured as Laschia javanicus. I think Hennings has also named it. In the sense of Léveillé (specimen in Patouillard's herbarium) it is Hexagona Miquelii, but Léveillé got a great many things wrong.

punctatus. No type found.

roseo-alba. Type in Box 11.* A subresupinate *Polyporus* or perhaps a *Fomes*, most probably the same as *carneus* in the original sense of Nees. I think it is quite different from the plant we have in the United States which we know as *Polyporus* (or *Fomes*) carneus, rarely forgetting to add the "Nees" though there exists not the slightest evidence that our American plant ever grew in Java.

spadiceus. Type in cover, also in Box 49*=Polystictus tabacinus. The figure that Junghuhn gave appears smooth but the plant is densely tomentose. The shape is also unusual as the plant is usually dimidiate.

spathulatus (as Laschia). Type in Box 127.* It is a Favolus. The types are in very poor condition.

tropicus. Type in Box 170.* It is a Polyporus (not a Fomes

I think) belonging to the section Ganoderma. The spores, which are typically those of this section, are distinctly rough.

umbilicatus. Type in *Polyporus* cover. It has been stated by Fries to be the same as arcularius and it so appears to me.

venulosus. Type in cover. I think it is a good species of *Polystictus*. Dimidiate, thin, white, with a glabrous but rugulose surface. Context white. Pores small.

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