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# Revision of Masseeella narasimhanii Thirum. (Uredinales)

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During his survey for rust fungi of Maharasthra State, India, the writer came across plants of *Fluggea leucopyros* Willd., showing rust infection on its leaves. The rust was initially seen in its pycnial and aecial stage only. Eventually, however, the uredial and telial material was also obtained from the same plant. Previous literature revealed that there was a record of a rust fungus, *Masseeella fluggeae* Thirum., on the host under study. The writer's collection was, therefore, compared with the type description of *Masseeella narasimhanii* Thirum., as originally described by Thirumalachar (1943), and was found to agree with it in all respects. This collection of rust, however, was found to possess characters which did not fit in with those of the genus *Masseeella* Dietl. These distinctive characters of the present rust collection on *Fluggea leucopyros* Willd. make the taxanomic status of *Masseeella narasimhani* Thirum., the rust under study, obscure. It is, therefore, proposed to revise the taxanomic status of *Masseella narasimhanii* Thirum. on the lines described in the following paragraph.

The genus *Masseeella* Diet. was established by Dietel in 1895 to accomodate the rust collected at Belgaum, India, and reported as *Cronartium capparidis* by Hobson. The host had been then identified as *Capparis* sp. Sydow H. & F. Petrak (1928) described a rust species on *Fluggea virosa* Baill. under *Masseeella fluggeae* Syd. Mundkur and Thirumalachar (1946) reexamined the host of *Masseeella capparidis* (Hobson) Diet. and found that the host of *Masseeella capparidis* (Hob.) Diet., was wrongly identified as *Capparis* sp. and was infact a species of *Fluggea, Masseella fluggeae* Syd., therefore was reduced to synonymy with *Masseeella capparidis* (Hobson) Diet. (Type). *Masseeella capparidis* (Hobson) Diet. (= *M. Fluggeae* Syd.) is charakterised by the presence of aecidioid cupulate aecia and paraphysate uredia along with pycnia being subcuticular and telia in hairlike gelatenous columns.

The comparison between different species of *Masseeella* is summarised in the following table.

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Table No. 1.

| No. | Name of fungus | Aecia | Uredia. |
|---|---|---|---|
| 1. | *M. capparidis* (= *M. Fluggeae)* | Aecidioid (cupulate) | Paraphysate. |
| 2. | *M. breyniae* | Aecidioid (cupulate) | Paraphysate. |
| 3. | *M. terminaliae* | Not known. | Paraphysate. |
| 4. | *M. narasimhanii* (under study) | Caeomoid (without any peridium.) | Aparaphysate & pycnidia opening by ostiole. |

The telial and pycnial characters are common to all species.

Ramakrishnan T. S. & K. (1958) have reported *M. putranjivae* collected on *Putranjiva roxburghii* whose description fairly tallies with the characters of the present fungus collected by the writer on *Fluggea leucopyros* Willd.

It is quite evident from the above comparision, that the present collection of rust under study differs from the other species of *Masseella* in having caeomoid aecia and aparaphysate and pycnidial type of uredia. These differences in characters of the present rust are sufficiently distinctive to warrent the segregation of this rust on *Fluggea leucopyros* Willd. from any species of *Masseeella* Diet. Hence it is proposed here to accomodate the present rust under study, namely, *Masseeella narasimhanii* Thirum. in a new rust genus, as it combines characters which do not allow its accomodation in any known genera of rust. The name *Kamatomyces* is, therefore, proposed to accomodate this rust, the diagnostic features of which are presented below:

**Kamatomyces** Sathe gen. nov. (Uredinales).

Pycnia subcuticular, lenticular, amphigenous, non-paraphysate.

Aecia caeomoid (without peridium), amphigenous, subepidermal, ierregularly growing and coalescing, erumpent; aeciospores catenulate.

Uredia erumpent, subepidermal in origin, pycnidial-opening by ostiole, aparaphysate; uredospores like aeciospores, echinulate.

Telia subepidermal in origin, breaking out in erumpent telial columns; teliospores one-celled, sessile, loosely, arranged in gelatinous matrix, thick walled, germination without dormancy, basidium external.

Pycnidia amphigena, subcuticularia, lenticularia, aparaphysata; aecidia caeomatoidea, amphigena, subepidermalia, irregulariter dispersa, saepe confluentia, demum erumpentia; aecidiosporae catenulatae; sori uredosporiferi subepidermales, postea quasi ostiolo aperti, aparaphysati; uredosporae accidiosporis similes, echinulatae; sori teleutosporiferi primum subepidermales, postea erumpentes; teleutosporae unicellulares,

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sessiles, in massa gelatinosa sitae, crasse tunicatae, basidio externo statim germinates.

**Kamatomyces narasimhanii** (Thirum.) Sathe, comb. nov.

Syn. *Masseeella narasimhanii* Thirum.

The type species collected on *Fluggea leucopyros* Willd. at Katraj Hill near Poona by A. V. Sathe dated 20-8-1965.

This new rust genus is named in honour of Prof. M. N. Kamat, Professor and Head of Department of Mycology & Plant Pathology M. A. C. S. Laboratories, Poona, India.

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