

NOMENCLATURAL NOTES ON *STRIATOPODOCARPITES* SEDOVA, 1956

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ABSTRACT

Striatopodocarpites Sedova, 1956, is considered not valid on nomenclatural grounds. Pollen grains hitherto assigned to *Striatopodocarpites* (Sedova) Bharadwaj, 1962, are reassigned to *Strotersporites* Wilson, 1962.

STRIATE bisaccate pollen are constantly met with in the Permian sediments (BALME & HENNELLY, 1955; BHARADWAJ, 1962; BHARADWAJ & SALUJHA, 1964; GREBE, 1962; JANSONIUS, 1962; LESCHIK, 1955, 1956 & 1959; SAMOILOVICH, 1953; SEDOVA, 1956; WILSON, 1962; JIZBA, 1962 and others). Several genera have come into being during the past decade and the taxonomy of these forms has baffled the student of spore taxonomy to a great extent. The confusion is more so because of the non-availability of Russian publications and their authentic translations. A reappraisal of the situation in the light of available Russian publications and translations is necessary. The present note concerns a nomenclatural change that has become necessary due to critical evaluation and study of the holotype of the type species of *Striatopodocarpites* Sedova, 1956.

Striatopodocarpites was originally instituted by Zoricheva and Sedova in 1954. They, however, did not designate a type or describe the genus; Sedova (1956) validated this genus and illustrated her paper with a line drawing of the type species *S. tojmensis* Sedova, 1956. The diagnosis given by her (as translated by Hart) is as follows: "The length of the pollen grain is 35-75 μ and the height of body 22-39 μ . The pollen grain has two sacs, each of which is larger than the central body. The line of attachment of the sacci to the central body is significantly shorter than the sacci diameter. The form of the sacci is variable, often encircling the central body, leaving a small part of it free. The exine of the central body is ribbed, coarse, and always darker in colour than the exine of the sacci. The reticulation of the

sacchi exine is rather large, with sinuous, slightly elongated walls".

Potonié (1958) emended the genus without taking into consideration the diagnosis and validation of Sedova (1956). He designated *Taeniaesporites antiquus* Leschik, 1956 as the type species of *Striatopodocarpites* Zoricheva and Sedova, 1954. This type was accepted by Bharadwaj (1962) who further emended and elaborated the genus on the basis of a study of a large assemblage of striate pollen found from the Raniganj stage of India. He has included in this genus bisaccate, bilateral pollen bearing a number of horizontal striations on the proximal face of the body with the exine in between intramicro-reticulate; with sacchi distally inclined and the zones of saccus attachment straight and full length leaving a wide saccus free area.

Since *Striatopodocarpites tojmensis* was designated by Sedova, 1956 as the type species of *Striatopodocarpites*, *S. antiquus* cannot be considered as the type species of this genus.

Hart has illustrated photographs of the type-specimens of Sedova's genera and re-illustrated her text-figures along side for comparison. His translations and illustrations are of immense value in solving taxonomic problems concerning this genus. A critical study of the photo-illustrations of *Striatopodocarpites tojmensis* makes it clear that it shares characters with *Lunatisporites* Leschik, 1955. *Lunatisporites* as emended and diagnosed by Bharadwaj (1962) is characterised by the presence of two vertical, semilunar, arcuate folds on the body with the two sacchi often coming together laterally forming a biconvex sulcus (see Bharadwaj, 1962, p. 94, TEXT-FIG. 11a). The description of Sedova (*l.c.*) though not adequate, the photo-illustrations provided by Hart and Sedova's text-figures show the vertical semilunar folds on the body and the biconvex sulcus very clearly which are characters that diagnose *Lunatisporites*. The type species of *Striatopodocarpites*, *S. tojmensis* Sedova, is

also closely comparable to *Lunatisporites acutus* Leschik, 1955.

Hart (1963) has also emended this genus and included a larger number of genera under synonymy. His generic circumscription is far too wide and is not acceptable to the present authors.

In our opinion *Strotersporites* Wilson, 1962 can accommodate the species described under *Striatopodocarpites* (ZORICHEVA & SEDOVA) Bharadwaj.

With this change the following transfers come into effect:

Lunatisporites (LESCHIK, 1955) Bharadwaj, 1962

Lunatisporites tojmensis (SEDOVA) comb. nov.

Syn. — *Striatopodocarpites tojmensis* Sedova

Holotype — Sedova, 1956; Pl. 41, Fig. 8 and Pl. 1, Fig. 3 in translation of Hart.

Strotersporites Wilson, 1962

Syn. — *Striatopodocarpites* (ZORICHEVA & SEDOVA, 1954), Bharadwaj, 1962.

Type species — *Strotersporites communis* Wilson, 1962.

Remarks — In the generic description Wilson (1962) describes the ornamentation of central body as irregularly pitted proximally

and laevigate to granulose distally. Bharadwaj (1962) has described the ornamentation as intramicroreticulate. There is a wide range of structural pattern observable and it varies from intramicroreticulate to broadly pitted (coarsely intramicroreticulate).

Strotersporites decorus (BHARADWAJ & SALUJHA, 1964) comb. nov.

Syn. — *Striatopodocarpites decorus* Bharadwaj & Salujha, 1964.

Holotype — Bharadwaj and Salujha, 1964; Pl. 10, Fig. 140.

Strotersporites magnificus (BHARADWAJ & SALUJHA, 1964) comb. nov.

Syn. *Striatopodocarpites magnificus* Bharadwaj & Salujha, 1964.

Holotype — Bharadwaj and Salujha, 1964; Pl. 10, Fig. 143.

Strotersporites diffusus (BHARADWAJ & SALUJHA, 1964) comb. nov.

Syn. — *Striatopodocarpites diffusus* Bharadwaj & Salujha, 1964.

Holotype — Bharadwaj and Salujha, 1964; Pl. 11, Fig. 148.

Sincere appreciation is expressed to Prof. L. R. Wilson for allowing us to examine material of the Flowerpot formation.

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