BURIADIA SEWARDII SAHNI: THE CORRECT NAME OF BURIADIA HETEROPHYLLA FEISTMANTEL

The nomenclature of the leafy coniferous shoots from the Lower Gondwana (Karharbari formation) of India that Seward and Sahni placed in their new genus Buriadia in 1920 is confused and needs to be clarified. These shoots have received two names, Buriadia heterophylla Feistmantel (Seward & Sahni, 1920) and B. sewardii sp. nov. (Sahni, 1928). The former name, though it has priority, is ambiguous and invalid, though it has been used by number of workers in recent years (Florin 1944; Pant & Nautiyal, 1967). We believe that Buriadia sewardii is the correct name for the plant.

The problem of nomenclature developed from Feistamantel's erroneous identification of some fossil leafy shoots from the Karharbari beds of Giridih Coalfield, India as Voltzia heterophylla in 1879. However, the type material of Voltzia heterophylla was from the Triassic of Europe and had been originally described by Brongniart (1828). Seward and Sahni (1920) realized that the Indian conifer was not a Voltzia, therefore, they created a new genus Buriadia for the Indian forms. But for some unknown reason they attributed their new binomial, Buriadia heterophylla to Feistmantel instead of naming it as a new species. Had they merely written "new species" after it, instead of using Feistmantel's name as its author, there would have been no difficulty. This, however, they did not do.

The intention of Seward and Sahni (1920) when they named their new plant is not clear. Some investigators assume that they intentled to name a new species, pointing out that in creating a new genus the selection of heterophylla was entirely appropriate because it was descriptive. But if this was their intention, why did they attribute it to Feistmantel who had no part in the formulation of the name? Then too, why did Sahni later decided that a new name was necessary if the plant had been properly named in the first place? It seems more likely that Seward and Sahni merely wished to retain heterophylla in deference to Feistmantel, because that was the trivial name he had used in the first place. That of course resulted in the ambiguous situation. Seward and Sahni's new name for the Indian plant did not alter the generic status of the original European material which remained a valid species of Voltzia. It did, however, place the one species heterophylla in both Voltzia and Buriadia, which of course is nomenclatorially absurd. Sahni, therefore, was quite right when he decided that a new name was in order for the Indian conifer and in proposing sewardii as the new trivial name. Our conclusion is that Buriadia sewardii Sahni is the correct name for the conifers described under Buriadia heterophylla.

Buriadia sewardii Sahni, 1928

- 1879 Voltzia heterophylla Brongn.: Feistmantel, p. 28, pl. 22, figs. 1-6; pl. 23, figs. 1-5, pl. 24, fig. 4, pl. 25, figs. 1-3.
- 1879 Albertia sp.: Feistmantel, p. 29, pl. 24, fig. 3, pl. 26, fig. 2.
- 1920 Buriadia heterophylla Feistmantel: Seward & Sahni p. 12, pl. 2, figs. 20-25a.
- 1928 Buriadia sewardii sp. nov.: Sahni p. 6, pl. 1, fig. 1-3.
- 1940 Buriadia heterophylla Seward & Sahni: Florin p. 310, pls. 161-162, figs. 10-23.

- 1944 Buriadia heterophylla Seward & Sahni: Florin, p. 376, text-figs. 11a-d, 17a-f, 23a-b.
- 1967 Buriadia heterophylla (Feistmantel) Seward & Sahni: Pant & Nautiyal, p. 27, pls. 4-12, fig. 1-78.

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P. K. MAITHY

Birbal Sahni Institute of Palaeobotany, Lucknow