

NEOTYPE OF *MECONOPSIS LONGIPETIOLATA* G. TAYL. EX HAY (PAPAVERACEAE) AND SOME ADDITIONAL NOTE

Hay in 1932 described a new species *Meconopsis longipetiolata* based on a plant which was originated from seed sent from Nepal. Taylor (1934) noted about the type specimens of this species as follows : "This particularly graceful member of this genus originated from seed sent from Nepal and the original description was based on a plant which flowered in 1932. At that time the species could not be correlated with any field specimens, but more recent collections from Nepal include *M. longipetiolata*. In the original publication it was stated that the type specimen was deposited in the British Museum (Natural History), but, by an unfortunate misunderstanding, the living plant on which the description was based was removed and has since been lost".

J. Cullen (1975) has not registered any type specimen of *Meconopsis longipetiolata* in his "Type specimens of Papaveraceae in European Herbaria".

Moreover, Whitmore (1979) stated that "No material exists of *M. longipetiolata* which was described on trivial characters from a living plant which subsequently died".

Henceforth, it proves that the type specimen of *M. longipetiolata* on which the description was based as mentioned in the protologue is lost. Since there is no extant plant or specimen from which the type description was made, it is necessary to select a specimen matching with the original plant from the type locality, Nepal. A specimen of *Malla* 9040 (KATH*) matching with type description of the species collected from Langtang to Kyangchin, Nepal is selected here as the Neotype.

The nomenclature, distribution and a note of the species is given below :

Meconopsis longipetiolata G. Tayl. ex Hay in New Fl. and Silva 4 : 226. fig. 83. July 8. 1932 [Neotype : Nepal, Langtang to Kyangchin, 3261 m, 14.7.1967, Malla 9040 (KATH)].

Distribution : Restricted to NEPAL, recorded between 3050-3965 m altitude.

Note : Whitmore (1979) has written the name *M. longipetiolata* G. Tayl. ex Hay under *M. paniculata* Prain as an obligate synonym.

Though *M. longipetiolata* G. Tayl. ex Hay & *M. paniculata* Prain are closely related, but in view of clear cut differences between the taxa we hesitate to treat the two species as conspecific.

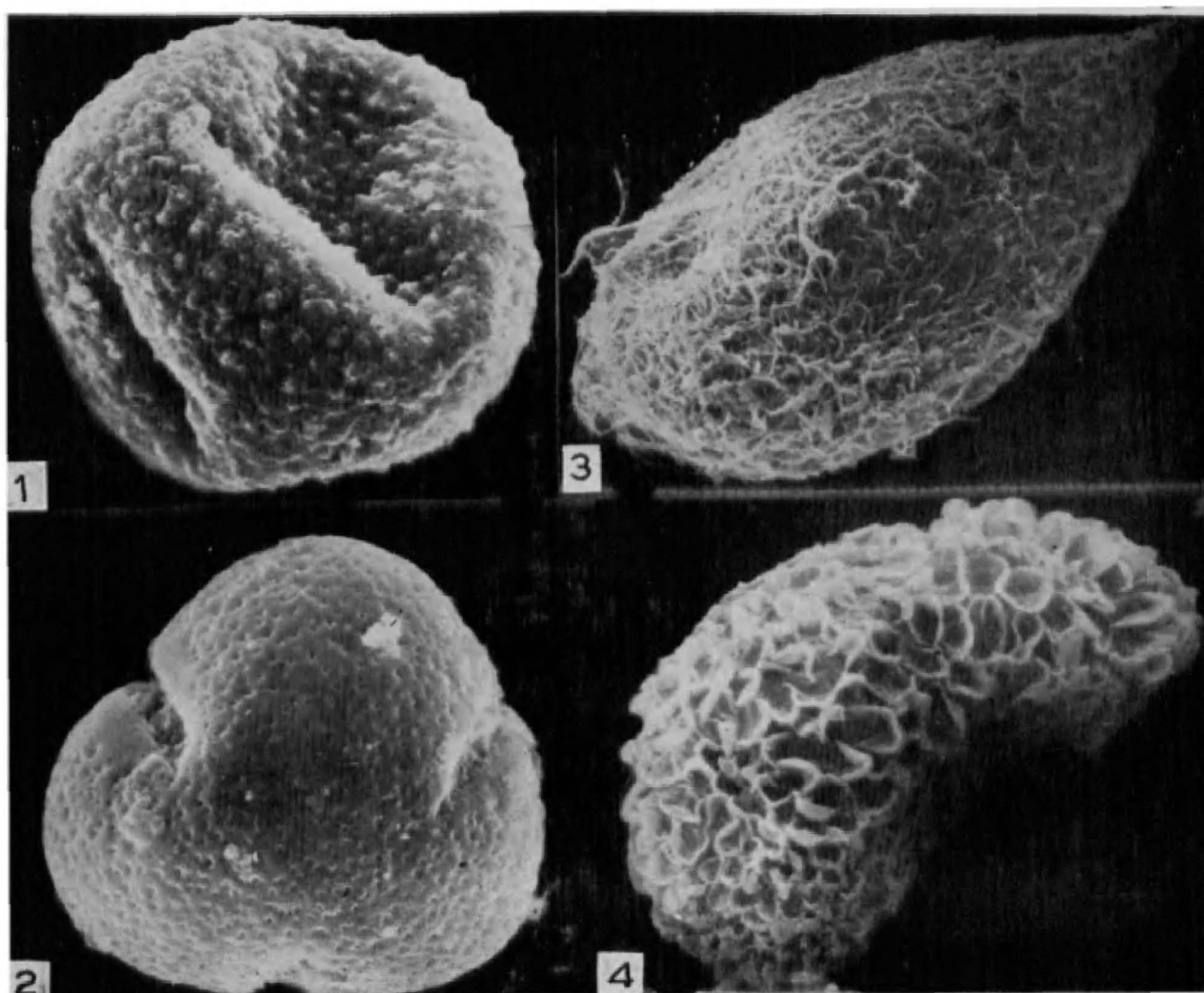
Taylor (1934) noted "It is probably most clearly related to *M. paniculata* and differ from that species in the incision of its leaves, its much longer petioles and absence of substellate pubescence on the leaves. *M. longipetiolata*, in its habit, is a much smaller and daintier plant than *M. paniculata*."

The two species are different in pollen and spermoderm of the seed characters as are given below.

Palynologically *M. longipetiolata* differs from *M. paniculata* in having tetracolpate pollen grains (Fig. 1) whereas in *M. paniculata* the grains are tricolpate (Fig. 2).

Also, scanning electron microscopic (SEM) studies on the spermoderm of the seeds show the remarkable difference between the two species. Seeds are oblong in *M. longipetiolata* and subreniform in *M. paniculata*. SEM studies show the rugose surface pattern in *M. longipetiolata* (Fig. 3), but in

*KATH = Botanical Survey and Herbarium Section, Godawary, Lalitpur, Nepal.



Figs. 1-4 : 1. *Meconopsis longipetiolata*—SEM photograph of tetralcolpate pollen grain $\times 10,000$. 2. *M. paniculata*—SEM photograph of tricolpate pollen grain $\times 10,000$. 3. *M. longipetiolata* SEM photograph of entire seed showing rugose pattern $\times 450$. 4. *M. paniculata* SEM photograph of entire seed showing coralloid appearance $\times 450$.

M. paniculata surface pattern is coralloid (Fig. 4).

In view of the above findings it reveals that the two species are taxonomically distinct and they are not conspecific.

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