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# THE GENERA BELOTIA Rich. AND TRICHOSPERMUM Bl. (Tiliaceae)*

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The genus *Belotia* was founded in 1845 by A. Richard (in R. de la Sagra, Hist. Cuba, Bot. 1: 207), based on a single species: *B. grewiifolia;* Richard added *Grewia mexicana* DC. (1824) as a synonym.

Sprague (in Kew Bull. 1921: 270—278) wrote a monograph on the genus. He characterized *Belotia* as follows: Presence of nectaries at the base of the petals and their absence on the androgynophore; the blue or violet, rarely white petals, the bilocular ovary with pluriovulate loculi; the loculicidal capsule, strongly compressed transversally to the septum and the discoid ciliate seeds. He than adds: "In all these respects *Belotia* resembles the Old-World genus *Trichospermum,* which differs in having a pair of nectaries at the base of the lamina, and a pseudo- umbellate inflorescence".

The differences are consequently very small and since I found that the laminal nectaries occur only occasionally in one species of *Trichospermum* (*javanicum*), it becomes debatable, whether the inflorescence character is of such importance as to keep both genera apart.

Burret (in Notizbl. bot. Garten Berlin 9: 603. 1927) keys out *Belotia* against *Trichospermum* in the following way: *Trichospermum* with 25—50 ovules, irregularly placed, as against *Belotia* with 12—16 ovules per locule in two regular rows; inflorescences in the former axillary and bi-or pluri-chasial, in *Belotia* axillary and terminal panicles.

Furthermore he adds: fruit with 2, rarely 3 cells in *Trichospermum* as to the 2—3 celled fruit in *Belotia*; this — of course — is a differential character of little or no value.

Burret does not mention at all the laminal nectaries; according to him (p. 855) the number of ovules and their placentation should be the main differential character.

I had at my disposal far more material of *Trichospermum* than Burret and could examine numerous young fruit, where the number of ovules and their placentation may be easily observed.

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I have come to the conclusion that there are in both genera actually 4 rows of ovules, attached to a central placenta. In both genera the ovules are placed regularly; the number in a single species may vary between 16 and 50 (*Trichospermum javanicum*); in *Trichospermum kurzii* King the number and placentation of the ovules is exactly like that in *Belotia insignis* Baill.

Remains the differential character of the inflorescence, which Burret — rightly — considers of secondary importance.

In *Trichospermum* and in *Belotia* the inflorescences are both axillar and terminal, or better, they are in both terminal; the leaves diminish gradually in size and if the upper axils have no inflorescences, it appears as if the inflorescences are axillary only, but in a single species (*T. javanicum*) this kind and pure terminal inflorescences are found.

The inflorescences of *Trichospermum* on the first sight look like a di- or pleiochasium, (the flowers are in both genera arranged in umbels with large, basal bracts), but especially in the fruiting stage one may often observe, that one branch of the pleiochasium is placed lower than the others.

In *Belotia* I could observe the same pattern, with this difference, that one branch of the pseudo-pleiochasia is much longer and hence the flower-umbels are not in the same level; pleiochasia in *Belotia* are often indicated by a reduced flowerhead in between the long branch and the short branch at the site of ramification.

I am therefore convinced, that even in the inflorescences there is no fundamental difference between the two genera and I have consequently combined them here (following Baillon, who already referred *Belotia* (*Grewia*) *mexicana* to *Trichospermum* (Hist. Pl. 4: 179. 1873).

1. **Trichospermum australis** (Little) Kosterm., *comb. nov.* (basionym: *Belotia australis* Little in J. Washingt. Ac. Sci. 38: 99. 1948).

2. **Trichospermum caribaeum** (Spr.) Kosterm., *comb. nov.* (basionym: *Belotia caribaea* Sprague in Kew Bull. 1921: 276).

3. **Trichospermum colombianum** (Cuatrecasas) Kosterm., *comb. nov.* (basionym: *Belotia colombiana* Cuatrecasas in Rev. Ac. Colomb. 8: 480. 1952).

4. **Trichospermum galeottii** (Turcz.) Kosterm., *comb. nov.* (basionym: *Belotia galeottii* Turczaninow in Bull. Soc. Natural. Moscou 19 (2): 504. 1846).

5. **Trichospermum grandifolium** (Spr.) Kosterm., *comb. nov.* (basionym: *Belotia grandifolia* Sprague in Kew Bull. 1921: 275).

6. **Trichospermum grewiifolium** (Rich.) Kosterm., *comb. nov.* (basionym: *Belotia grewiifolia* A. Richard Ess. Fl. Cub. 209, t. 22 et in R. de la Sagra, Hist. Cuba 10, Bot. 1: 83, t. 21. 1845).

7. **Trichospermum insignis** (Baill.) Kosterm., *comb. nov.* (basionym: *Belotia insignis* Baillon in Adansonia 10: 182. 1872).

8. **Trichospermum macranthum** (Spr.) Kosterm., *comb. nov.* (basionym: *Belotia macrantha* Sprague in Kew Bull. 1921: 274).

9. TRICHOSPERMUM MEXICANUM (DC) Baillon.

10. **Trichospermum occidentalis** (Cuatr.) Kosterm., *comb. nov.* (basionym: *Belotia occidentalis* Cuatrecasas in Rev. Ac. Colomb. 8: 481. 1952).

11. **Trichospermum reticulatum** (Spr.) Kosterm., *comb. nov.* (basionym: *Belotia reticulata* Sprague in Kew Bull. 1921: 277).

12. **Trichospermum tabascanum** (Spr.) Kosterm., *comb. nov.* (basionym: *Belotia tabascana* Sprague in Kew Bull. 1921: 278).