SHORT COMMUNICATION

Thespesia lampas (L.) - A Close Wild Relative of Gossypium

Punit Mohan, Vinita Gotmare and TP Rajendran¹

Central Institute for Cotton Research, P.B. No. 2, Shankar Nagar Post Office, Nagpur-440025, Maharashtra ¹ Indian Council of Agricultural Research, Krishi Bhawan, New Delhi-110012



Fig. 1 (a&b): Portion of flowering shoot; (c) Seed: Small, dark brown & lint less; (d) Capsule: Dry, loculicidally dehiscent, locules opening longitudinally at 45°- 65° angle.

Thespesia lampas Linn. was collected in vegetative form from village: Kolappully; Taluqa: Ottapalam; District: Palakad; State: Kerala and planted in wild species garden of CICR Research Farm, Nagpur (MS).

Taxonomic description

Thespesia lampas is a small shrub, chromosome number n=13 belongs to family Malvaceae; Leaves: broadly palmately lobed, middle lobe larger, rudimentary lobe absent; Venation: reticulate and palmate divergent; Bracts; three, large, persistent; Inflorescence: terminal shoots bearing axillary flowers; Flower; yellow petals with long claw, Petal blotch: present; Ovary: Superior with axile placentation; Fruit: Capsule, dry, brittle, loculicidally dehiscent, 4-6 locules, Locule opening

pattern: longitudinal at 45°-65° angle; Seed: Small, dark brown, lintless.

The plants supported abundant vegetative growth but failed to enter into reproductive phase for six consecutive seasons. Nascent unopened flower buds aborted persistently. Plants were however forced to enter into reproductive phase by subjecting it to moisture stress, pruning and lopping. Blooming period of *Thespesia lampas* did not match with *Gossypium anomalum* (B-genome – *Gossypium* wild species). The size of pollen grains of *T. lampas* measured up to 400 μ with pollen tube width measuring up to 123 μ , making it amenable to enter and penetrate into stigma/style of *G. anomalum*. Early efforts are under way to cross it effectively with *G. anomalum*.