THE IDENTITY OF SOLANUM MCCANNII SANTAPAU

Santapau (J. Bomb. nat. Hist. Soc. 47: 6536-54, 1948) has described Solanum McCannii from Khandala, which according to him differs from S. surattense Burm. f. (=S. xanthocarpum Sch. & Wend.) in the erect or suberect habit with fairly long internodes; stem and branches woody or subwoody, not herbaceous; branches sharply angular, either not at all or very faintly striate; prickles not so dense as and generally smaller than in S. surattense; petioles longer; corollas larger; calyx smaller; pedicels both in flower and fruit longer and stouter; the whole plant much less pubescent.

It is well known that S. surattense is widely spread in India, occurring both in plains and at higher elevations, showing a great variation in the pubescence and other vegetative and floral characters. Thus specimens of S. surattense collected during the rainy season will have the leaves with few stellate hairs and are glabrous in nature, when compared with those collected during the dry months; they have less number of prickles. Even the floral characters also show a flexibility. Specimens of S. surattense collected from the neighbouring area, Bushi-Lonavla, on 27th June 1964 with the field number Reddi 97937 (BSI) have almost glabrous leaves when compared with those collected during the dry months from the same area.

Wakhloo (in Flora oder All. bot. Zeit. 155: 237-249, 1964 & 486-496, 1965) who worked on the factors controlling the ecological variation on the germination and development of S. surattense concludes, that the species shows much variability in habit, nature of pubescence, etc., governed by an interaction of biotic agencies and moisture relations. According to him, the species appears to be annual in regions with an annual rainfall or about 120 cm and above. In regions with less rainfall and at long intervals lapse between showers, the species behaves like a perennial attaining a spread of 3 m or more and flowers throughout the year. A considerable number of flowers have been observed to be sterile, morphologically distinguished from the fertile ones by their larger size, larger ovaries and styles. In areas such as Kashmir Valley where winter is severe, the plant is rather small.

"Plant prickly, diffuse, procumbent, both annual and perennial, reaching a spread of 2-3 m under favourable conditions of growth, the young branches and leaves on both surfaces covered with deciduous stellate hairs, the upper leaf surface later becomes glabrous and shiny remaining however, armed with a myraid of prickles on both surfaces."

Thus the above studies indicate the variability of plant, both in its morphological and floral characters. The author himself has studied the plant both in field and herbarium. The characters given by Santapau for separation of S. McCannii from S. surattense do not hold good, which are nothing but seasonal variations. The types of S. McCannii are preserved in the Blatter Herbarium, Santapau 2972! & 2973! collected on 18th Oct. 1943. The same numbers Santapau 2972 & 2973 have been cited by him under S. surattense also [Rec. bot. Surv. India 16(1): 196-197, 1953]. It might be, that he has first placed these under S. surattense, but later named them as S. McCannii.

After a study of the range of variation of the species S. surattense, both in the field and herbarium, and the type sheets of both surattense and McCannii, I feel justified, that S. McCannii is nothing but a seasonal form of S. surattense.

Solanum surattense Burm. f. Fl. Ind. 57, 1768 (excl. syn. Pluk. et Raj.); Santapau in Bull. bot. Surv. India 3: 20, 1961. S. xanthocarpum Sch. & Wendl. Sert. 1: 8, t. 2, 1795; Santapau in J. Bomb. nat. Hist. Soc. 47: 653, 1948. S. McCannii Santapau in J. Bomb. nat. Hist. Soc. 47: 654, 1948 & Rec. bot. Surv. India 16(1): 196, 1953 (syn. nov.)

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