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**Short Communication**

# COLLECTING CULTIVATED AND WILD SPECIES OF CORCHORUS IN GUJARAT, INDIA

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The genus *Corchorus* has about 40 species distributed throughout the tropical regions of Africa, South America, Australia, China and South East Asia (Kundu et al., 1959). In India eight species are found (Hooker, 1894; Sinha *et al.* 1988). *C. capsularis* Linn and C. *olitorius* Linn. are commercially cultivated for fibre, while *C. aestuans* Linn., *C. depressus* Linn., *C. fascicularis* Linn., *C. trindes* Linn., *C. trilocularis* Linn. and *C. urticaefolia* Lam. are wild and have not been commercially exploited. Some of these (*C. aestuans, C. capsularis, C. depressus, C. fascicularis* and *C. olitorius*) are of medicinal value. India is primary centre of origin of *C. capsularis* and possesses a rich diversity. Hence an exploration was undertaken to collect germplasm diversity from parts of Gujarat during December 1989-January 1990.

Germplasm collection was carried out in Ahmedabad, Amreli, Banaskantha, Bhavnagar, Jamnagar, Junagarh, Kheda, Mehsana, Panchmahal, Rajkot, Surendranagar and Vadodara districts characterized by north-western plains, central highlands and coastal landscape with varying climate (arid-semi/arid) and soil type. The surveyed area lies between 20° to 25° north latitude, 69° to 75° east longitude and 25 to 300 m altitude. A total of one hundred and sixty four collections (Table 1) comprising of *Corchorus aestuans, C. depressus, C. fascicularis, C. olitorius, C. tridens, C. trilocularis* and *C. urticaefolia* were collected from 153 different sites characterized by barren/waste places, along water reservoirs, near ponds, hillocks, Gir forest, coastal areas and cultivated fields (Fig. 1). Bulk, random and non random sampling methods were followed for collecting 50 capsules and large number of seeds at each site. Herbarium specimens were made and passport data were recorded on standard sheets.

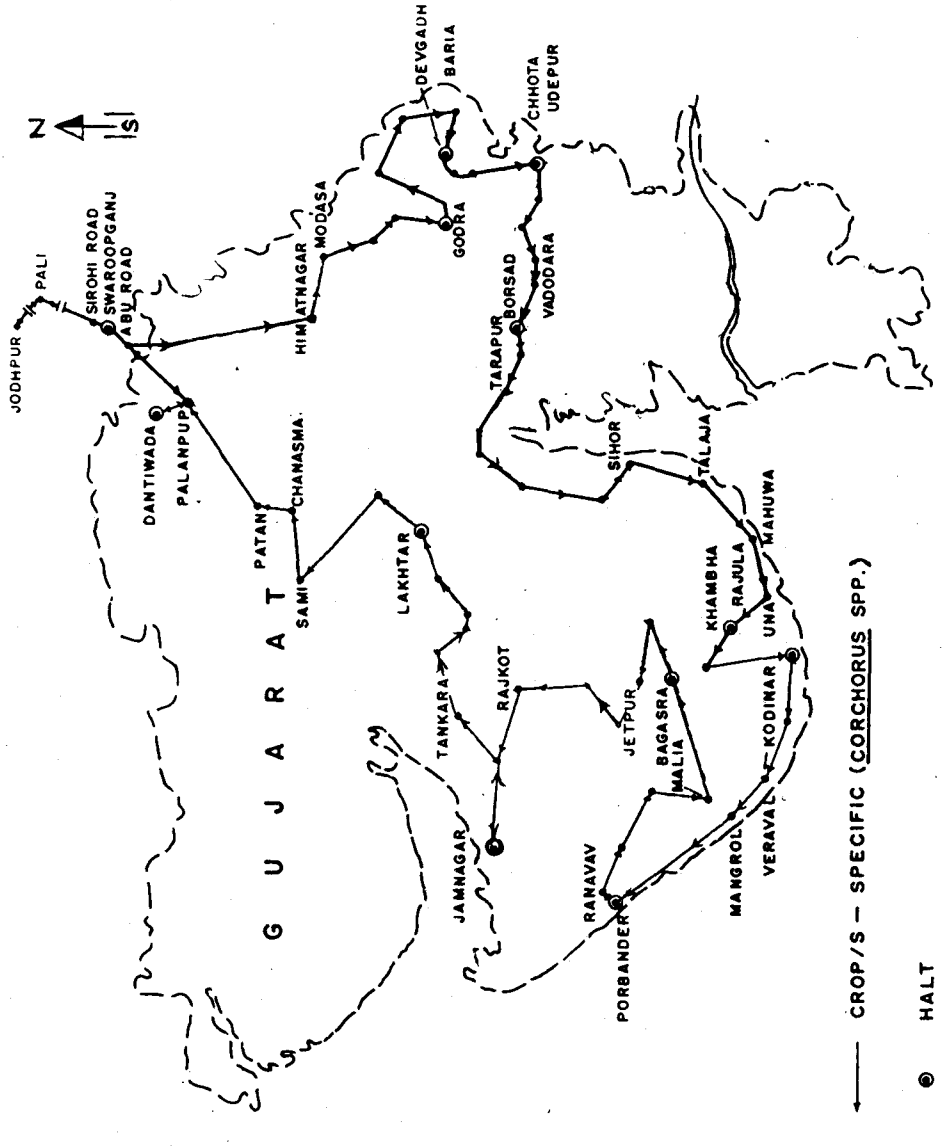


Fig. 1. Map showing route followed during collection of cultivated and wild speices of *Corchorus* in Gujarat, India

A remarkable variability was found in different species of *Corchorus* for their growth habit (erect, spreading), plant height (dwarf, medium., tall), plant type (less to highly branched), stem colour (green, purple), leaf shape (simple, ovate, oblong, lanceolate, serrate margin), leaf size (small, medium, large), leaf colour (light to dark green), pubescence, number of flowers per peduncle (solitary to five), flower colour (dull yellow, yellow), number of capsules per cluster (one to five), capsule shape (compressed, round, angled, straight, curved), capsule size (short, medium, long), capsule surface (smooth, rough), number of locules per capsule (three to five), seed colour (light brown, lead black, steel grey, light black), seed surface (smooth, rough, wrinkled) and seed shape (round, angular, wedge-shaped). The material collected was sent to N.B.P.G.R. Headquarters, New Delhi along with passport data for providing National Indigenous Collection (NIC) numbers and onward supply to the concerned Institute for evaluation and conservation.

It was noted during the exploration trip that Junagarh, Amerli and parts of Bhavnagar districts were rich with all the seven species of *Corchorus*. An intensive exploration is needed to further sample germplasm from

**Table 1. Collection of different species of *Corchorus* from parts of Gujarat.**

| Districts | *Corchorus* spp. | | | | | | | Total collections |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Ahmedabad | 02 | - | - | 03 | - | 03 | 01 | 09 |
| Amreli | 05 | 01 | 01 | 13 | 01 | 08 | 07 | 35 |
| Banaskantha | - | - | - | 02 | - | 01 | - | 03 |
| Bhavnagar | - | - | 02 | 04 | - | 06 | 05 | 19 |
| Jamnagar | - | 01 | - | 04 | - | 01 | - | 06 |
| Junagarh | 04 | 05 | 01 | 15 | 02 | 11 | 10 | 48 |
| Kheda | 02 | - | - | 02 | - | 01 | 01 | 06 |
| Mehsana | 02 | - | - | 01 | 01 | 01 | 02 | 07 |
| Panchmahal | 03 | 01 | - | 03 | 03 | 01 | - | 11 |
| Rajkot | 01 | - | - | 07 | - | 02 | - | 10 |
| Surendranagar | - | - | - | 02 | - | 01 | 01 | 04 |
| Vadodara | 04 | - | - | 02 | - | 02 | - | 08 |
| 12 | 23 | 08 | 04 | 58 | 07 | 37 | 27 | 164 |

1 = C. *aestuans* L.; 2 = *C. depressus* L.; 3 = *C. fascucilaris* L.; 4 = *C. olitorius* L.; 5 = *C. tridens* L.; 6 = *C. trilocularis*; 7 = *C. urticaefolia* Lam.

unexplored areas as reported by Shah (1978). The germplasm collected may be helpful in various crop improvement programmes.

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