Present research paper provides the information regarding plant species of Convolvulaceae family growing surrounding areas of Meshvo river of Dehgam taluka, District Gandhinagar of Gujarat state, India. Plant species belongs to family Convolvulaceae mostly as climbers and prostrate herbs. Plant species of Convolvulaceae from such area have listed systematically which counts 25 species from 07 genera, most of the plant species 21 number observed as wild and only four plant species of them are cultivated.

DOCUMENTATION, conservation and finding enhancement strategies of floristic diversity is considered to be one of the important challenges in present day conservation biology research and policy making process. The study of Plant Biodiversity of a particular region and utilization of plant species in day-to-day life of human beings of the region has become a need of the time. Conserving biodiversity is basic to our survival and well-being and using it sustainably forms part of the Indian culture and lifestyle. Wild plants play an important role in the national economy and wellbeing of the occupant population in a region. The basic necessity like food, fodder, fuel, fiber, medicine, timber and many other minor produces like gum-resins, lacs, etc. are mostly obtained from forests, grazing lands and waste lands.

Several taxonomists did continue to survey the forest areas and many new records for North Gujarat were added at regular intervals, such as, “Plants of Northern Gujarat” (Saxton and Sedgwick, 1918; Saxton, 1922) and “A contribution to the Flora of North Gujarat” (Yogi,
Two forest ranges such as Ambaji and Danta of District Banaskantha were explored for floristic study by Patel, R.S. (2003) and Patel, K.C. (2003) respectively. Indian deserts (Bhandari, 1978). Amirgadh range forest of Banaskantha district was explored by Patel, K.M. (2008). Cooke, Th. (1958) has worked in The Bombay Presidency while Shah, G.L. (1978) also compiled the work on floristic studies of Gujarat. Forest vegetation and phytogeography of Khedbrahma region (North Gujarat) by Sabnis, S. D. & Bhatt, R.P. (1975). Plants of Northern Gujarat by Saxton, W. T. (1922), Saxton, W. T. and Sedgwick L. J. (1918). Flora of Taranga hills by Shah, C.K. 1964, 1964a and 1964b. Yogi (1970) have been worked in North Gujarat. There are few plant species in Flora of Gujarat State by Shah, G. L. (1978) with distribution in Dehgam and its adjoining areas. But none of the earlier workers had covered surroundings Meshvo river of Dehgam Taluka taxonomically. Although the flora of some parts of North Gujarat is known, there are still many areas, which have yet, remained unexplored botanically as well as taxonomically. The present study has been undertaken to make a fresh and thorough exploration of the region under study in order to bring out a scientific and comprehensive account on the plant species belongs to Convolvulaceae family growing surroundings Meshvo river of Dehgam Taluka.

This study reveals the plant species of Convolvulaceae family from the surroundings Meshvo river of Dehgam Taluka Dist. Gandhinagar of Gujarat, on the results obtained from extensive and intensive studies of the vegetation of area. Field survey was carried out from last 07 months during post-graduation for observation and collection of plants. During field trips photography of study area and plants were taken. The villages listed here were visited whenever required one or more times; Amrajina Muvada, Antoli, Antroli, Bhadroda, Chiskari, Dod, Dumecha, Harakhjina Muvada, Jindva, Jesajina Munada, Jivajini Muvadi, Kadjodkra, Kalyanji Na Muvada, Khadiya, Khanpur, Lalajini Muvadi, Lakhajina Muvada, Lihoda, Machhang Moti, Machhang Nani, Machhang Nani, Meghraj Na Muvada, Mirjapur, Mithana Muvada, Moti Pavthi, Nagjina Muvada, Pahadiya, Palundra, Piplaj, Rakhiyal, Sahebji Na Muvada, Sametri, Sampa, Shiyavada, Sujana Muvada, Vadod, Vardhana Muvada, Vasna Rathod, Vasna Sogthi, Velpura, etc.

Identification and ethnobotany of plant species during field work was done by compiling different available floras and authenticated by experts from college department (Jain and Rao, 1977). Surveys were made to collect and identify the plants. The enumerate plants were categorized according to their Scientific name, Local name and description. For purpose of identification, after studying the characters of the plant, checked them with the “Flora of Gujarat State” (Shah, 1978 and Sutaria, 1969).
All the collected plant species are described here alphabetically with serial number, valid scientific name, authority, synonyms, page number(s) from Flora of Gujarat State were plant species described, short botanical description for identification, species status, habitat, local name(s), flowering and fruiting period.


Greyish- or whitish-tomentose, stout, woody twiners. Leaves 6-35x5.5-30 cm, broadly ovate, whitish-tomentose beneath. Flowers in axillary, capitate cymes. Berries -2 cm across, globose, smooth, glabrous.

Cultivated. (SAMUDRASOK, VARDHARO, SAMADAR SOG).

**FLS & FRS:** Aug.-Oct.


Glabrous herbs. Leaves 1.4-3.6x0.2-0.8 cm, ovate-triangular or linear oblong, glabrous, Flowers axillary, solitary, bright-rosy-purple. Capsule 0.4-0.6 cm long, glabrous, Seeds dark-reddish-brown, sub-trigonous, glabrous.

Throughout in plains; common. (KHETRAU PHUDARDI, NERIVEL)

**FLS & FRS:** Oct.-Jan.


Prostrate or suberect, 15-30 cm long, hairy herbs. Leaves 0.8-2X0.2-0.6 cm, linear-oblong or elliptic-oblong, tomentose. Flowers pale-to bright-rosy, axillary, solitary or in fascicles. Capsule 0.4-0.5 cm across, ellipsoidal, dark-brown, microscopically Papillose, glabrous.

Throughout, common. (DHOLI SHANKHAVLI, MANKHNI).

**FLS & FRS:** Throughout the year.


Appressed or patently hairy herbs. Leaves 1-2.5X2-1 cm, Ovate, elliptic or oblong, appressed-hairy. Flowers axillary, soli-Tary, on filiform peduncles. Capsule 0.3-0.4 cm across, glabrous, rounded. Seeds 0.15-0.2 cm long, oblong, smooth, glabrous, dark-brown.

Throughout, among grasses; common. (KALI SHANKHAVALI)

**FLS & FRS:** Throughout the year.


15-30 cm long, filiform, radially spreading herbs, rooting at nodes. Leaves 0.6-1.2 cm, broad, nearly orbicular, glabrous. Flowers 0.6-0.8 cm across, axillary, solitary. Capsule nearly globose, glabrous.

Bulsar and Chhotaudeour; not common.

Perennial, glabrous herbs, rooting at nodes. Leaves 2.2-8.5X 0.9-4 cm, broadly ovate-triangular, seldom almost linear. Flowers Solitary or 3-4 in cymes. Capsule 0.6-0.8 cm long, ovoid, aiculate, Glabrous. Seeds microscopically hairy.

Throughout, in moist ground along margins of ponds and Ditches or floating; common. (NALI NI BHAJI, NADA NI VEL)

FLS & FRS: Throughout the year.


Creeping herbs. Leaves 3-12X1.5-8 cm, broadly ovate to almost orbicular, glabrous. Flowers few to many, in axillary cymes. Cultivated; seldom an escape: (SHAKKARIYU)


Evergreen herbs, with watery juice. Leaves 4.5-6 cm broad, deeply 5-7 lobed, broadly ovate or nearly orbicular, glabrous, flowers in axillary, subumbellate cymes. Capsule 1-1.2 cm long, ovoid or subglobose, glabrous.

Throughout, ornamental or on hedges as an escape; common.

FLS&FRS: Throughout the year.


Glabrous, slender herbs. Leaves 2.5-6 cm broad, broadly ovate or nearly orbicular, digitately 5-7-lobed, lobed lanceolately. Flower axillary, solitary. Capsule 0.8-1.2 cm broad, subglobose, glabrous. Seeds hairy.

Pavagadh and north Gujarat; rare on hedges.


Slender, trailing or twining, appressed hairy herbs. Leaves 1.5-9.5X0.4-6.5 cm, ovate-oblong or ovate-lanceolate, appressed- Hairy. Flowers in axillary cymes. Capsule 0.3-0.4 cm long, ovoid or oblong, glabrous, Seeds light-greyish-black or blackish-brown, Glabrous, microscopically reticulate.

Throughout, among grasses; common. (BODI FUDARDI)

FLS & FRS: Aug.-jan.

Straggling shrubs or small trees with milky juice. Leaves 7-16X5-14 cm, broadly ovate or ovate-lanceolate, thinly pubes- Cent beneath. Flowers in terminal, umbellate cymes. Throughout (except Kutch), planted or naturalized; native of S. America. (NAKTI)

FLS: Throughout the year.


Slender herbs. Leaves 2.8-6X2.5 cm, ovate, glabrous, Entire or trilobed. Flowers in terminal, lax, umbellate cymes. Capsule 0.6-0.8 cm long, ovoid, glabrous. Seeds ellipsoidal, light-black, glabrous, microscopically reticulate.

Throughout on hedges and low shrubs or trees in forests; Native of America. (GANESH VEL)

FLS & FRS: Sep.-Jan.


Annual, glabrous or patently long-hairy herbs. Leaves 1.5-4X1.8-4.4 cm, broadly ovate or nearly orbicular, glabrous or sparsely hairy. Flowers 1.5-2.3 cm across, axillary, solitary Pedunculate. Capsule 0.8-1.2 cm long, ovoid, apiculate, glabrous. Seeds deep-brown, oblong, smooth, and glabrous.

Throughout on hedges; common. (VAD FUDARDI)

FLS & FRS: July-Dec.


Annual, glabrous or patently long-hairy herbs. Leaves 1.5-4X1.8-4.4 cm, broadly ovate or nearly orbicular, glabrous or sparsely hairy. Flowers 1.5-2.3 cm across, axillary, solitary Pedunculate. Capsule 0.8-1.2 cm long, ovoid, apiculate, glabrous. Seeds deep-brown, oblong, velvety.

Throughout on hedges; common. (VAD FUDARDI)

FLS & FRS: July-Dec.


Prostrate, glabrous herbs. Leaves 2.5-5.8X3-12 cm, Fleshy; lobes ovate or orbicular, glabrous. Flowers axillary, solitary. Capsule 1.5-2 cm long, ovoid, slightly apiculate, glabrous, brown; seeds glabrous, hairy.

Throughout along sea coast on hedges; also cultivated. (MARYAD VEL)

FLS & FRS: Throughout the year.


Twining or trailing, densely patently-hairy herbs. Leaves 4-15 cm broad, deeply 5-7-lobed, broadly ovate or orbicular, Appressed-hairy. Flowers 2 2.5 cm long, pale-rosy-purple or
Seldom almost white. Capsule 0.6-0.8 cm across, papery, subglobose or ovoid, glabrous. Seds grey-pubescent.
Throughout on hedge, among grasses, waste lands; (VAG PADI NI VEL)

Slender, herbaceous twiners. Leaves 3-4.5 cm long, deeply pinnatisect, segments narrowly linear or filiform. Flowers axillary, Solitary or few in cymes. Capsule 0.6-1 cm long, ovoid or nearly Globose, glabrous, brown. Seeds cuneate, black, minutely hairy.
Throughout, an ornamental or escape, on hedges. (KAMINI, KAMLATA)
FLS & FRS: Throughout the year.

Slender twiners. Leaves 2.5-10X1.6-9.5 cm, ovate-triangular, entire or shallowly to deeply lobed, glabrous. Flowers 0.8-2 cm long, pale-petulantly, in axillary, umbellate cymes, Capsule globose, glabrous.
Bulsar, Dangs, Vallabhadri Vidhyanagar, on hedges; rare. (NANI FUDARDI)
FLS & FRS: Sep.-Oct.

Twiners with weak, pale-bluish-purple or brownish stem. Leaves 1.5-5X0.8-4.3 cm, ovate, glabrous. Flowers 1.5-2 cm across, in axillary and terminal, long pedunculate, capitate cymes. Fruits not seen.
Cultivated as an ornamental; very sparingly an escape. (JAXINI)
FLS & FRS: Throughout the year.

Twining, lignose, densely yellowish-brown hairy annuals. Leaflets 5.2-6.5X1.5-2.7 cm, sessile, elliptic-lanceolate or obvate-Oblong, appressed-hairy. Flowers white or creamy-white, few, In cymes. Capsule ovoid, apiculate, glabrous. Seeds orbicular, pale-reddish-brown, glabrous, smooth.
Throughout on hedges. (PANCH PAN NI FUDARDI);

Twiners, yellowish-brown-hairy in youner parts. Leaves 4-8 cm broad, deeply lobed, 1.7-3.5X0.4-0.8 cm, glabrous, Pinnatifid or toothed. Flowers axillary, solitary. Capsule 0.5-0.6 Cm across, rounded, glabrous. Seeds 0.15-0.2 cm long, oblong, glabrous.
North Gujarat (Ahmedabad, Kadi, Himmatnagar); on Hedges; rare.

Slender, thinly hairy herbs. Leaves 0.6-3X1.3-3.7 cm, Glabrous, petiolate. Flowers yellow, axillary, solitary. Capsule 0.5-0.6 cm across, subglobose, smooth, glabrous. Seeds subtrigonal, glabrous, smooth, brownish black or chestnut-brown.

Throughout, in drying moist ground. (UNDARDI, UNDAR KANI)


Twining, glabrous, slender, annuals. Leaflets 1.5-7X1.1-1.8 cm, elliptic-lanceolate. Flowers creamy white, axillary, solitary. Capsule 0.7-1.0 cm across, ovoid, glabrous. Seeds oblong, hairy, light black.

South, Central and North Gujarat and Saurashtra. On hedges and rare.

FLS & FRS: Oct.-March


Prostrate, slender herbs. Leaves 1.2-3X0.2-0.8 cm, linear, linear-oblong or obovate-oblong, glabrous. Flowers yellow, axillary, solitary or few cyme. Capsule 0.4-0.6 cm across, globose or ovoid, glabrous. Seeds 4, pale blackish-brown, glabrous, smooth.

Throughout; common. (BHINIGARIO)

FLS & FRS: July-Dec.


Throughout, on hedges; common. (FANG)


During the field trips, it was observed that the whole area of surroundings of Meshvo river of Dehgam Taluka is under anthropogenic pressure due to cutting of the general vegetation, over grazing as well as continuous mining activities, etc. Government agencies and/or NGOs should provide environment education to the people such as farmer, local people and other stalk holder of area for awareness of importance of lands and land plants. People participation should increase for conservation of angiosperm plants of the area because each and every plant and/or living organism has play an important role in biodiversity and as a part of ecosystem of particular area.

**REFERENCES**

Plate - 1

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>View of River bank</td>
</tr>
<tr>
<td>B</td>
<td>Way to Farm</td>
</tr>
<tr>
<td>C</td>
<td>View of River bed</td>
</tr>
<tr>
<td>D</td>
<td>View of River bed farming practice done</td>
</tr>
<tr>
<td>E</td>
<td>View of Empty River bed</td>
</tr>
<tr>
<td>F</td>
<td>View of natural habitat</td>
</tr>
</tbody>
</table>

PLATE - 1
<table>
<thead>
<tr>
<th>Image</th>
<th>Scientific Name</th>
<th>Local Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Argyreia nervosa (Burm. F.) Boj.</td>
<td>SAMUDRASOK, YARDOHARO</td>
</tr>
<tr>
<td>B</td>
<td>Convolvulus arvensis L.</td>
<td>KHETRAU PHUDARDI</td>
</tr>
<tr>
<td>C</td>
<td>Convolvulus microphyllus (Roth) Sieb. ex Spr.</td>
<td>DHOLI SHANKHAVLI, MANKHNI</td>
</tr>
<tr>
<td>D</td>
<td>Evolulus alsinoides (L.) L.</td>
<td>KALI SHANKHAVLI</td>
</tr>
<tr>
<td>E</td>
<td>Ipomoea aquatica Forsk.</td>
<td>NALI NI BHAJI, NADA NI VEL</td>
</tr>
<tr>
<td>F</td>
<td>Ipomoea bataias (L.) Lam.</td>
<td>SHAKKARIYU</td>
</tr>
</tbody>
</table>

PLATE - 2
<table>
<thead>
<tr>
<th>Image</th>
<th>Scientific Name</th>
<th>Local Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ipomoea aquatic Forsk.</td>
<td>Informator showing plant</td>
</tr>
<tr>
<td>B</td>
<td>Ipomoea carinata (L.) Sw.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Ipomoea coptic (L.) Roth ex R.S.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Ipomoea eriocarpa R. Br.</td>
<td>BODI FUDARDI</td>
</tr>
<tr>
<td>E</td>
<td>Ipomoea fistulosa Mart. ex Choisy</td>
<td>NAKTI</td>
</tr>
<tr>
<td>F</td>
<td>Ipomoea hederifolia L.</td>
<td>GANESH VEL</td>
</tr>
</tbody>
</table>

**Plate - 3**
<table>
<thead>
<tr>
<th>Image</th>
<th>Scientific Name</th>
<th>Local Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ipomoea nil (L.) Roth.</td>
<td>KALA DANA</td>
</tr>
<tr>
<td>B</td>
<td>Ipomoea obscura (L.) Ker-Gawl.</td>
<td>BODI FUDARDI</td>
</tr>
<tr>
<td>C</td>
<td>Ipomoea pes-caprae (L.) Sw.</td>
<td>MARYAD VEL</td>
</tr>
<tr>
<td>D</td>
<td>Ipomoea pes-tigridis L.</td>
<td>VAGH PADI NI VEL</td>
</tr>
<tr>
<td>E</td>
<td>Ipomoea quamoclit L.</td>
<td>KAMINI, KAMLATA</td>
</tr>
<tr>
<td>F</td>
<td>Ipomoea trico L.</td>
<td>NANI FUDARDI</td>
</tr>
<tr>
<td>Image</td>
<td>Scientific Name</td>
<td>Local Name</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>A</td>
<td>Jacquemontia pentantha (Jacq.) G. Don</td>
<td>JAXINI</td>
</tr>
<tr>
<td>B</td>
<td>Merremia aegyptia (L.) Urb.</td>
<td>PANCH PAN NI FUDARDI</td>
</tr>
<tr>
<td>C</td>
<td>Merremia dissecta (Jacq.) Hall. f.</td>
<td>PANCH PAN NI FUDARDI</td>
</tr>
<tr>
<td>D</td>
<td>Merremia gangstica (L.) Cufod.</td>
<td>UNDARDI, UNDAR KANI</td>
</tr>
<tr>
<td>E</td>
<td>Merremia quinquefolia (L.) Hall. f.</td>
<td>BHINGARO</td>
</tr>
<tr>
<td>F</td>
<td>Merremia tridentata (L.) Hall. f. subsp. tridentata.</td>
<td></td>
</tr>
<tr>
<td>Sr.</td>
<td>Scientific Name</td>
<td>Local Name</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>A</td>
<td>Rivea hypocrateriformis Choisy</td>
<td>FANG</td>
</tr>
<tr>
<td>B</td>
<td>Rivea hypocrateriformis Choisy</td>
<td>FANG - flowering</td>
</tr>
<tr>
<td>C</td>
<td>Informator</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>View of River Bed</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Ipomoea batais (L.) Lam. Cultivated farm</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Field work study Collection</td>
<td></td>
</tr>
</tbody>
</table>

**PLATE - 6**