

# [Investigation of takatu flora](https://assignbuster.com/investigation-of-takatu-flora/)

SELECTED FLORA OF TAKATU AREA, OF BALOCHISTAN, PAKISTAN.

Mohammad Imran, Mohammad Anwar, Habibullah.

ABSTRACT: A general survey for investigation of Takatu Flora was taken at Takatu Mountain along with its periphery. The investigations were conducted in 2013-14. Mainly 52 species were collected belonging to 24 families and were identified through available literature. Though the area is having diversity in floristic composition, the collection of the plants are area specified and the list provide the plants that could be selected directly from the area if these plants are of use especially for anti-biological activity.

### INTRODUCTION:

Balochistan is the largest province i. e. 44% of Pakistan land area. 94% of the area is composed of Range land (PFI) and nearly 1. 4% forests are present throughout. The Balochistan is mainly composed of mountainous area. Takatu is situated in semi-Arid zone. The precipitation is about 15 to 18 inches and uncertain precipitation is in winter and few rains in the months July and August of summer.

Quetta is a hill station and is surrounded by colossal series of mountains which infect forms the citadel of Quetta city. Takatu range is north of Quetta city and expanding fans-wise in an eastern direction toward Harnai and Ziarat valley. An outline spur of Takatu is having two twin peaks that form the highest points i. e. 11390 feet above sea level.

Floristically Balochistan is very important and the Balochistan provide a list of medicinal plants as well as the plants for forage and used as food. The Balochistan is having great diversity but need scientific exploration of these resources.

Limited literature is available regarding the biochemistry of indigenous plats available in the area. The work by 1, 2 3 4 7 8 are about the floristic composition of plants in different areas of Balochistan. The plants available in Takatu were collected as to make these plants area specified for anti-biological activity and plants biochemistry.

### Materials and Methods

Common plants of Takatu Mountain along with its periphery at Takatu area were collected during field visits in 2013-2014. The Plants were identified with the help of available literature. (M. Shareeque Khan & S. M. Irshad, 2005; Mufakihirah, Misbah & Shazia: 2009. IUCN: 2009). The information about the plants were collected from local inhabitants and through available literature. Plants were classified on basis of usage i. e. 1. Food/vegetable. 2. Medicinal. 3. Fodder/forage.

### Discussion

The collected plants belonged to families: Rosaceae (4sp.) Lamiaceae (7sp.), Anacardiaceae (1sp.) Poaceae (2sp.), Oleaceae (1sp.), Fabaceae (5sp.), Berberidaceae (1sp.) Asteraceae (8sp.), Boraginaceae (1sp.), Convolvulaceae (3sp.), Cupressaceae (1sp.), Chenopodiaceae (1sp.), Zygophyllaceae (2sp.), Ephedraceae (2sp.) Moraceae (1sp.) Apiaceae (2sp.), Liliaceae (3sp.), Brassicaceae (1sp.), Amaryllidaceae (1sp), Solanaceae 1, Malvaceae 1, Tamaricaceae 1, Papaveraceae 1, Asclepiadaceae 1.

The ethno-botanical study revealed that 16 species were used as fodder, 33 had medicinal values and 6 were used as food for the Homo-sapiens. It was observed that the area has been grazed heavily. The ground vegetational cover was also on degraded level.

## Result and Observation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S/N | LOCAL NAME | BOTANICAL NAME | FAMILY | USES/MEDICINAL VALUE |
| 1 | Wild Almond | Prunus eburnean (Aitch). | Rosaceae | Wild almond is used as fuel wood. The fruit is collected which is afterward utilized as food or some time sold in the local market. |
| 2 | Shinshobi | Mentha logifolia Linn. | Lamiaceae | The plant is having very good effect on the digestion. Tea made from the leaves has traditionally been used in the treatment of fevers, headaches, digestive disorders and various minor ailments. The essential oil in the leaves is antiseptic, though it is toxic in large doses. |
| 3 | Shahna | Pistacia khinjuk (Stocks). | Anacardiaceae | The plant is havingAnti-Inflammatory Activity. The Fruits locally known as “ Shahne” are grind into powder form and then used as food. Berries are also eaten by men. |
| 4 | Bahama grass | Cynodon dactylon Linn. | Poaceae | A fodder for cattle. It is used in liver complaints and also having diuretic properties. |
| 5 | Olive | Olea europaea Linn. | Oleaceae | Olive is devouring anti-inflammatory, anti-fungal and anti-bacterial properties. It decreases LDL cholesterol and blood pressure levels. It also act as a metabolism inducer and bile flow stimulator |
| 6 | Jungli Gulab | Rosa moschata Sm. | Rosaceae | Oil is extracted from the plant which is used in restoring natural skin tone and color. |
| 7 | Makhi | Caragana ambigua Stocks. | Fabaceae | The plant is highly nutritious and its leaves are rich in minerals, such as P, K, Ca, Si, Mg, Na, Fe, and Al. Caragana is also a good honey plant. Its root, flower, shoots, bark or seed can be used in herbal medicine. |
| 8 | Zaralg | Berberis lyceum Royle. | Berberidaceae | The roots are aperient, carminative, febrifuge and ophthalmic. They are used in the treatment of eye complaints, menorrhagia, chronic diarrhoea and piles. The leaves have been used in the treatment of jaundice. Berberine, universally present in rhizomes of Berberis species, has marked antibacterial effects. |
| 9 | Chanjan Butai | Nepeta glomerulosa Boiss. | Limiaceae | The plant is used against Pneumonia and itch. |
| 10 | Chasen boti | Heliotropium dasycarpum | Boraginaceae | Used as fodder for cattles |
| 11 | Zwal | Achillea santolina Linn. | Asteraceae | Achillea santolina used traditionally as antidiabetic, anti-inflammatory and to relieve pain or dryness of the navel and stomach pain. |
| 12 | Tarkha | Artemisia maritima Linn. | Asteraceae | The plant is having anithelmintic, antiseptic and stimulant effects. It cause ulcer if used in larger quantity. |
| 13 | Bachki | Convolvulus arvensis | Convolvulaceae | The plant is used as a fodder for sheep and goats. |
| 14 | Ubashta | Juniperus excelsa | Cupressaceae | It is very important tree, the barriers of the tree are used in cosmetics, medicines and used as food. The green tea from its leaves is worth mentioning. The wood is utilized as fuel wood, or for constructional purposes. |
| 15 | Shorai | Haloxylon griffthii | Chenopodiaceae | It is a fodder for cattle especially in dry condition. The seeds are also used by men in harsh condition. |
| 16 | Spanda | Peganum harmala Linn. | Zygophyllaceae | Peganum harmala has been used to treat pain and to treat skin inflammations. The root is applied to killliceand the seeds kill insects. It is also used as ananthelmintic. |
| 17 | Nari oman | Ephedra nebrodensis | Ephedraceae | Ephedrine is manufactured from this species by Markers Alkaloid, Quetta. |
| 18 | Ghat oman | Ephedra intermedia | Ephedraceae | Ephedrine and Pseudo-ephedrine are extracted from the plant. The extraction is used for controlling asthma. |
| 19 | Anjir | Ficus carica Linn. | Moraceae | Fruit is emollient, demulcent and nutritious. The recent studies suggest that theanti-inflammatoryandantioxidant activity of ficus carica latex is due to the presence ofsteroids andflavonoids |
| 20 | Wild cherry | Prunus serotina Ehrh. | Rosaceae | The roots and the bark of Wild Cherry are a blood tonic and appetite stimulant. Wild Cherry is mostly noted for its use in respiratory problems. It has a soothing and sedative effect on the nervous system. In digestive disorders its use is very noticeable. It helps the flow of gastric juices. |
| 21 | Khumbi | Sophora mollis Var. | Fabaceae | The juice of plant is good for sore eye. Decoction of root is applied warm to the head to remove headache. |
| 22 | Tor sag/kala Zeera | Traychyspermum ammi Linn. | Apiaceae | Trachyspermum ammi is traditionally believed to be adigestiveaid. |
| 23 | Shezgi | Eremurus persicus Boiss. | Liliaceae | —————————– |
| 24 | Sehj | Eremurus stenophyllus Boiss. | Liliaceae | Leaves cooked and eaten as a vegetable |
| 25 | Gajar | Artemisia scoparia Waldst & Kitam. | Asteraceae | The plant can be utilized for the cure of pain in the ear. It is also a fodder for livestock. |
| 26 | Sounf | Foeniculum vulgare Mill. | Apiaceae | Fruit is used as a cure for stomachache. |
| 27 | Yellow star-thistle | Centaurea solstitialis | Asteraceae | The powdered seed is used as a remedy for stone. The powdered root is said to be a cure for fistula and gravel. The plant is eaten as a vegetable |
| 28 | Kanday | Alhagi maurorum | Fabaceae | Alhagi maurorum is used as asweetener. It is utilized in treatment forailments related to thebile ducts, nasal-polyps, diaphoretic, diureticandantiseptic. It is also used as fodder for camels and goat. |
| 29 | Peshai | Crambe cordifolia | Brassicaceae | Plant is used as a cure for itch and also eaten as vegetable. |
| 30 | ——— | Aegopordon berardioides Boiss. | Asteraceae | —————– |
| 31 | Gangu | Hertia intermedia Boiss. | Asteraceae | Plant is used for the treatment of boils, pimples. |
| 32 | Choranski Gul | Ixiolorion montanum Herb. | Amaryllidaceae | Root and flowers of the plant is eaten. |
| 33 | Angoorthora | Solanum nigrum | Solanaceae | The ripe fruit is eaten. The plant is used as a strongsudorific, analgesicandsedativewith powerfulnarcoticproperties. Infusions are used indysentery, stomachcomplaints andfever. |
| 34 | ———– | Lactuca serriola Linn. | Asteraceae | TheAncient Greeksalso believed its pungent juice to be a remedy againsteye ulcers. The plant causes urination and relaxed sexual desire. |
| 35 | ——— | Carthamus oxyacantha M. Bieb. | Asteraceae | The plant is having cholesterol lowering effect. |
| 36 | Ritachk | Convolvulus spinosus Burm. f. | Convolvulaceae | Flowers are eaten. The plant serves as fodder for livestock. |
| 37 | ———— | Astragalus armatus Willd. | FABACEAE | it is used as tonic, stimulant and in cases of anemia |
| 38 | ———– | Marrubium vulgare | Lamiaceae | folk medicineto aid digestion, soothe sore throats, and relieve inflammation |
| 39 | Yirk | Perovskia abrotanoides karel. | Lamiaceae | is used as fortifier, antiseptic and anti-inflammatory in treating dermal diseases, also used as a cooling medicine. |
| 40 | Pachko | Malva neglecta Wallr. | Malvaceae | A drug used for cooling and also utilized as fodder for cattle. A tea can be made from the dried leaves. The root is used as a toothbrush. |
| 41 | Surai | Rosa lacerans | Rosaceae |  |
| 42 | Sursanda | Hymemocrater sessilifolius Benth. | Lamiaceae | Soaked the leaves in water overnight and afterward it is used as morning drink |
| 43 | Ghaz | Tamarix ramosissima Ledeb. | Tamaricaceae | Used as Forage for camels. |
| 44 | Shin Moray | Thymus vulgaris | Lamiaceae | Its essential oils are having medicinal value. It is having antiseptic and antioxidant properties. it is used in treating respiratory diseases and a variety of other diseases such as dry coughs, whooping cough, asthma, laryngitis, gastritis and diarrhea |
| 45 | Lach Gul | Papaver rhoeas Linn | Papaveraceae | The flowers of corn poppy have a long history of medicinal usage, especially for ailments in the elderly and children. Chiefly employed as a mild pain reliever and as a treatment for irritable coughs, it also helps to reduce nervous over-activity, coughs and poor digestion. The leaves and seeds are tonic. |
| 46 | Khatol | tulipa lehmanniana | Liliaceae | The bulbs are used as food and the leaves of the plant are used as fodder for cattle. |
| 47 | Ispalmen | Calotropis procera | Asclepiadaceae | Warm leaves along with oil are applied to wounds for its cure. Powdered flowers – Use in colds, coughs, asthma and indigestion. In form of paste applied to elephantiasis a disease of the skin and subcutaneous tissues.. |
| 48 | Kundulay | Phlomis spectabilis Falc. | Lamiaceae | ———————– |
| 49 | Jandar | Avena fatua | Poaceae | Seeds believed as poisonous, used as emollient (relieves irritation of skin and soften the skin) refrigerant (relieves feverishness, produces a feeling of coolness) and diuretic (increases the amount of urine) and basically it is used for cattle as a food. |
| 50 | Khorbar | Tribulus terrestris | Zygophyllaceae | It is used as cattle feed. It is powerful medicinal plant for muscles building and protection of cardiovascular protection. |
| 51 | Shenallo | Astragalus stocksii | Fabaceae | Plant is used as a fodder for donkeys, camels, goats and sheep. |
| 52 | Bachki | Convolvulus arvensis Linn. | Convolvulaceae. | Plant is used as fodder for sheep and goat. |

### References

1. Panah. M, Yousuf. M, Afzal M. and Abdullah B. (2013). Plants Treasures, Traditional Knowdege and Baloch Society. Balochistan Study Centre, University of Balochistan, Quetta. Bi-annual Research Journal, “ Balochistan Review”, vol-28, No. 1. ISBN: 1810-2174,
2. Rasool Bakhsh Tareen, M. I. Zaidi, M. A. K. Malghani, Q. A. Ali and M. Asif Enthnobotanical studies of medicinal and aromatic plants of Juniper forest, District Zairat, Balochistan. Res. J. U. O. B., 1(2) 17(2002).
3. Ghazala Shaheen 2005. Seasonal variation in nutritional and anti-nutritional components of native shrubs and trees grown in Hazargangi Chiltan National Park, Karkhasa and Zarghoon PhD Thesis. Department of Botany, University of Balochistan Quetta.
4. R. Rarei and H. Mohammadi (2012). The evaluation of medicinal properties of Perovskia abrotanoides Karel Maya Beikmohammadi. Middle-east Journal of Scientific Research 11 (2): 189-193.
5. Badshah, I., F. Husssain and Z. Mohammad. 1996. Floristic and Ethnobotanical studies on some plants of Pirghar Hills, S. Wizaristan, Pakistan. Pak. j. pl. sci., 2: 167-177
6. A Khalfallah, A Karioti, D Berrehal, A Kabouche, M Lucci, Z Kabouche and A Bilia 2011. Flavonoid Triglycosides from Astragalus Armatus. Planta Med Thieme, J. 77 – pg47
7. Shinwari, Z. K. and M. Shah. 1996. The Ethnobotany of Kharan District, Balochistan, proceeding first training workshop Ethno. Appl. Conserv. 124-132. HARC, Islamabad.
8. Shah, S. R. U., G. Hussan, A. Rehman and I. Ahmed. 2006. Ethnobotanical studies of flora of District Musakhel and Barkhan in Balochistan, Pakistan. Pak. J. Weed Sci. Res., 12: 199-211.
9. Ahmad, S. S. A. Wahid. E. Bukhsh, S. Ahmad and S. R. Kakar “ Antihyperlidemic Properties of Carthamus Oxyacantha” (2009) Pakistan Journal of Science Vol: 61(2) pp: 116-121 (journal)
10. Farrukh Hussain, S. Mukaram Shah and Hasan Sher. (2007). Traditional Resource Evaluation of some plants of Mastuj, District Chitral, Pakistan. Pak. J. Bot., 39(2): pp: 339-354,