



Traditional Practices of *Balanitesaegyptiaca* (L.) Del. in Rajasthan

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ABSTRACT

The present paper deals with traditional practices of *Balanitesaegyptiaca* (L.) Del. (Hingota) in Rajasthan state. It belongs to family *Balanitaceae*. *Balanitesaegyptiaca* (L.) Del. is a multibranched, spiny large shrub or tree. Fruits of this plant (Hingota) act as natural detergent, and used in washing of clothes in rural areas of Rajasthan. Products, medicinal values, botanical description and ecological services of the plant in state are considered in this article.

Key words: *Balanitesaegyptiaca* (L.) Del., Deciduous, Pubescent, Saponins, Shelter belt

1. INTRODUCTION

Balanitesaegyptiaca (L.) Del. is a thorny, long-lived tree species, belong to family *Balanitaceae*, but it was formerly included in the family *Simaroubaceae*. The name *Balanites* (from the Greek for acorn, referring to the fruit) was given in 1813 by Alire Delile and replaced *Agialid* (derived from the Arabic name for the tree, 'heglig'). It is known as the simple-thorned torchwood, Egyptian myrobalan, soap berry tree and Thron tree in some countries. This tree is native to much of Africa and parts of the Middle East. The fruit of *Balanitesaegyptiaca* has been called desert date or soap berry. In Rajasthan it is popularly known as Hingota, in Sanskrit it is called Ingudi.

The growth of *B. aegyptiaca* is slow. Fruits tend to ripe and fall on the land. It is a long-lived tree species and seeds germinate easily. Tree associates of *B. aegyptiaca* are *Acacia senegal*, *Acacia leucophloea*, *Acacia*

raddiana, *Acacia nilotica*, *Anogeissus pendula*, *Capparis decidua*, *Salvadora oleoides*, *Prosopis juliflora*, *Ziziphus mauritiana* and *Ziziphus nummularia*. Pure stand of *B. aegyptiaca* is also occurs at many places. Traditional practices of *Balanitesaegyptiaca* (L.) Del. by local societies of the Rajasthan have been pointed out in this communication.

2. MATERIAL AND METHODS

Rajasthan is the largest state of India, is located in the north-western region of the country. It is lying between 23°30' and 30° 11' North latitude and 69° 29' and 78° 17' East longitude. Rajasthan state has different variable and diversified climatic, physiographic, edaphic and habitat conditions. The forests vegetation of Rajasthan are mainly dry deciduous and dry, tropical thorn forest. Several studies on the ecological and floristic works have been made by Duthie (1903-1929), Champion and Seth (1968), Singh and Pandey (1982), Pal and Saren

(1986), Shetty and Singh (1987-93), Joshi (1989), Sharma (1990), Kikim and Yadava, (2001), Bairwa, Gupta, Gupta and Srivastava (2012), Meena (2012), Gayake, Awasarkar and Sharma (2013), Sikarwar (2014), Sharma (2016, 2019).

B. aegyptiaca mostly occurs in open waste lands, sub humid dry tropical areas, inundated plains, riverbanks and valley and slopes of hills. It is also found in arid and semiarid thickets and deciduous bush lands. This species is well adapted to grow in a wide range of habitats, soil types and climatic moisture levels.

During the study (2017-20), the information regarding the present communication was gathered and noted. In order to acquire the details of knowledge on the practices and utilisation of products of *Balanitesaegyptiaca*(L.) Del. area were visited, approached to local people and literature surveyed.

3. RESULTS AND DISCUSSION

Systematic enumeration:

Botanical name: *Balanitesaegyptiaca*(L.) Del.

Family: Balanitaceae

Local name: Hingota

Balanitesaegyptiaca(L.) Del. is hermaphrodite, spiny, deciduous, multibranched, large shrubs or trees. Trunk and bark grey, deeply fissured longitudinally. Leaves compound and spirally arranged on the shoots, 2-foliolate, leaflets elliptic-oblong or obovate-oblong, glaucous, dark green, pubescent. Flowers in axillary, fascicled cymes, pale or greenish yellow. Fruits ovoid, yellowish-green when ripe, seeds hard.

Flowering: December to March.

Fruiting: March to July.

Locality: Common in scrub forests, wastelands, along the roads.

During the observation and survey of the area, it has also been analysed that some traditional practices and ancient methods are still being carried as their requirements. The present study reveals that *Balanitesaegyptiaca*(L.) Del. tree have been utilised for various beneficial purposes by local and ethnic societies.

Balanitesaegyptiaca(L.) Del. provides fodder, saponins, medicinal products and fuel-wood valued for

subsistence living in Rajasthan particularly in arid and semi-arid areas. Traditional practices, products and ecological services of *Balanitesaegyptiaca*(L.) Del. is given below:

Fodder: The tree is lopped for fodder in Rajasthan, is a common practices. The fresh and dried leaves, and sprouts are all eaten by livestock.

Fuel: The wood is good as firewood and easily available to local and tribal people.

Timber: The timber has traditionally been a minor product.

Saponins: The *Balanitesaegyptiaca* tree contains saponins. Saponins are named from the soapwort plant. It is quite bitter and can be found in many common foods such as some beans. Saponin is also an effective cleaning agent. It is a natural detergent and foaming substance. Washing clothes with fruits of *Balanitesaegyptiaca*(L.) Del. is an old popular traditional practice in rural areas of Rajasthan.

Poison preparation: The active agent of the poison is saponin. The compound is toxic to some animals. The fruit kernel has been found as a mild laxative, as antidote to arrow poison, and also acts as a vermifuge. Fruit of *Balanitesaegyptiaca* is used to prepare the blunt headed arrows (commonly known as Fenna) which is used to kill the bird.

Balanitesaegyptiaca plants are also used in fishing in local ponds and tanks by ethnic people of some part of state. Plant parts preparations is spread on the surface of the pond. With the result fishes get unconscious and stupefied and start flock together floating on the water surface. All the fishes then easily collected.

Medicine: Paste of leaves is applied on wounds, cut and boils. Decoction of root is used to treat malaria. Powder of fruits is used as remedy for whooping cough and skin disease. The bark is used to deworm cattle in Rajasthan. The fruits have been also used in the treatment of liver and spleen diseases. Gums is sucked and chewed when fresh, it is used in chest problems.

Ecological services: The thorny habit, easy approach and usually evergreen behaviour potentially makes this tree is an attractive element to utilise as shelterbelts. *B. aegyptiaca* is commonly used as shelter belt in state, because it is suitable for fencing, barriers and boundaries. Cut branches of it is used to make livestock enclosures. Coppices and pollards well and can

regenerate after lopping and heavy browsing. *B. aegyptiaca* also resists drought and seasonal flooding.

4. CONCLUSION

Present observation forms base-line information about the traditional practices of *Balanitesaegyptiaca*(L.) Del. plant of Balanitaceae family in Rajasthan state. Local people of state used this plant for various purposes. It was observed that the local inhabitants used the tree and their products very carefully. This study creates the awareness about the conservation of this plant.

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