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A COMPREHENSIVE REVIEW ON SIDA SPECIES (*BALA*)

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ABSTRACT
Malvaceae is distributed widely in tropical and temperate regions. Few species of *Sida* are used in different traditional systems medicines and sold in market. To avoid frequent adulteration the identification of *Sida* species is very necessary. The most commonly sold species is *Sida cordifolia,* seeds of which are being used as *Ayurvedic* drug named "*Bala*". It is being frequently adulterated with other species of *Sida* such as *Sida rhombifolia, Sida cordata, Sida spinosa* and *Sida alba*. Some other species are also being used as medicine: *Sida acuta, Sida rhombifolia, S. spinosa, S. veronicaefolia, S. ovate*. In *Vedic* literature, we may find the wide description of *Bala* in *Atharva Veda* and *Sama Veda*. In *Amarkosha* the mention is found in *Vanoushadhi Varga*. In *Atharva Veda, Kalpasutra* the mention regarding *Bala* is available. In *Paippalada Samhita, Bala* is cited as *Rasayana, Vishaghna, Balya* and *Pramehaghna*. In *Atharva Parishishta Bala* is used as *Pushpaabhisheka*. *Sida cordifolia,* with its ephedrine and pseudoephedrine has gained a lot of interest and is now sold by many of these companies. Chemical constituents of *Sida cordifolia* are Ephedrine. Pseudoephedrine Sterculic, malvalic and coronaric acid, Fatty acids. The Plant is alternative tonic, astringent, emollient, aphrodisiac etc. It has possible antioxidant effect also. *Nagbala* is a single drug *Rasayana* mentioned in *Brihattrayi*. They had used *Nagbala* in both preventive aspect and as *Naimittik Rasayana* in *Kshata* and *Kshaya*. *Sushruta Samhita* mentioned it in *Sarvopaghatashamaniya Adhyaya* which suggests its property in healing diseases. There are three plant species considered as *Nagbala* by different scholars *Sida spinosa, Sida* humilis and *Grevia hirsuta*. From which *Sida humilis* is considered as *Nagbala* by many authors.

KEYWORDS: *Atibala, Bala,* Malvaceae, *Nagbala, Sida cordifolia*.

INTRODUCTION

A family of about 85 genera and 1000 to 1500 species, Malvaceae are distributed widely in tropical and temperate regions. 22 genera and about 125 species of Malvaceae have so far been reported from India. Some of the larger genera, along with their common names or number of reported species in parenthesis, include *Hibiscus* (rose mallow, 300), *Sida* (200), *Pavonia* (200), *Abutilon* (Indian mallow, 100), *Alcea* (60), *Malva* (Mallow, 40), *Lavatera* (25), *Gossypium* (Cotton, 20), and *Althaea* (12). A number of species are pests in agriculture, including *Abutilon theophrasti* and *Madiola caroliniana*, and others that are garden escapes. Cotton (four species of *Gos-sypium*), kenaf (*Hibiscus cannabinus*), cacao, kola nut, and okra (*Abelmoschus esculentus*) are important agricultural crops. The fruit and leaves of baobabs are edible, as is the fruit of the durian. The family is recognized by *Hibiscus ro-sa-sinensis* (rose of China) because of its beautiful large flowers and hundreds of its known cultivated varieties. Cotton (*Gossypium*), the most important plant of this family from the commercial viewpoint, has been cultivated in India since last 5000 years (Sharma, 2004).[1]

Few species of *Sida* are used in different traditional systems medicines and sold in market. The demand is high and drugs are sold as broken plant parts, adulteration is very frequent in crude drug market.1 To avoid frequent adulteration the identification of *Sida* species is very necessary. These adulterants are responsible to deteriorate the quality and efficacy of the drug. Moreover, they may cause deleterious effect on human health.2 The most commonly sold species is *Sida cordifolia* (seeds are being used as Ayurvedic drug named "Bala"). *Sida cordifolia* is being frequently

adulterated with other species of *Sida* such as *Sida rhombifolia*, *Sida cordata*, *Sida spinosa* and *Sida alba*.3 Some other species are also being used as medicine: *Sida acuta*, *Sida rhombifolia*, *S. spinosa*, *S. veronicaefolia*, *S. ovate*.[2]

To identify several plant species, besides family features and characters, it is very important to carefully examine the taxa for their identification. Characterization means to describe the character or quality of highly heritable anatomical and morphological features for classification, identification and evolutionary studies of plant species (Vicente et al., 2005). The relative studies of plant structure, morphology and anatomy have always the determination of plant systematics which endeavours to illuminate phylogeny, plant diversity and evolution (Endress, 2000). The study of morphological variation is very essential for taxonomic explanation and is generally used as an important tool in studying the systematic position of plants and population discernment (Vicente et al., 2005). The natural variation is generally easily seen in the leaves of a plant, flowers, stems may show similar variation. Morphological characters of plant can be used to measure, compare, count, differences or similarities in plant taxa which are used for identification of plant, their descriptions and classification (Amitha & Joseph, 2019).[3]

An impressive number of plants that are introduced in Ayurveda system of medicine have been using for the treatment of many disorders since thousands of years. According to World Health Organization, herbal medicines are being used by 80% of the world population primarily in the developing countries for primary health care. This plant *Sida cordifolia* (Linn.) belongs to family malvaceae is a very important Ayurveda medicinal plant used from ancient times. *Bala* is known as *Bariyara* locally, *Kharethi* in Hindi, *Bedela* in Bengali, *Chikana* in Malyalam, *Baladana* in Gujarati, *Simaka* in Punjabi and Country mallow in English etc. The drug is attributed *Balya*, *Kantikarka*, *Grahi*, *Vrishya*, *Ojhovardhaka*, *Stambhana*, *Brihmana*, *Shothahara Rasayana* and *Hridya* properties in different Ayurveda *Samhitas* and *Nighantus*. The plant name *Bala* is created on the name of "*Parvati*" (Goddess of strength and beauty). Present review study highlights the contribution of *Bala* in *Vedas*, *Samhitas* and *Nighantus*.

Taxonomic classification of *Bala*
Kingdom: Plantae – Plants
Subkingdom: Tracheobionta – Vascular plants
Superdivision: Spermatophyta – Seed plants
Division: Magnoliophyta – Flowering plants
Class: Magnoliopsida – Dicotyledons
Subclass: Dilleniidae
Order: Malvales
Family: Malvaceae – Mallow family
Genus: Sida (Linn.) – fanpetals
Species: *Sida cordifolia* (Linn.)

- **Vernacular Names**

Classical Name: *Sahadeva, Vatyalika, Vatyapushpi, Vatyayani*
Sanskrit: *Bala, Kharyashtika, Vatyayani, Bhardodani*
English: Country mallow
Hindi: *Kungyi, Bariyaar, Khareti*
Bengali: *Swetberela, Brela, Bala,*
Gujarati: *Mahabala, Khapat*
Kanada: *Hettuthi, Hettugigada* Malyalam: *Kurunthott, Vellurum*
Marathi: *Chikana, Khiranti* Punjabi: *Kowar, Simak, Kharent*
Tamil: *Nilatutti, Paniar-tuthi*
Telugu: *Tellantisa, Tellagorra, Chiribenda*

***Ayurvedic* properties**
Rasa: *Madhura*
Guna: *Laghu, Snigdha, Pichchhilla*
Virya: *Shita*
Vipaka: *Madhura*

MATERIAL AND METHODS

The information has been collected from many *Vedas*, *Samhitas* and *Nighanus*, research articles and internet sources etc. to the concept of therapeutic uses of *Bala*.

Bala* in *Vedas Kala Granthas

In *Vedic* literature, we may find the wide description of *Bala* in *Atharva Veda* and *Sama Veda*. In *Amarkosha* the mention is found in *Vanoushadhi Varga*. In *Atharva Veda*, *Kalpasutra* the mention regarding *Bala* is available. In *Paippalada Samhita*, *Bala* is cited as *Rasayana*, *Vishaghna*, *Balya* and *Pramehaghna*. In *Atharva Parishishta Bala* is used as *Pushpaabhisheka*. In *Vedic* scripture *Bala* is described synonym as *Saha*, *Sahamana*, *Jivala*, *Viryavati*, *Vishdushani*, *Nagharisha*, *Sahasvati*, *Arjunapaki* and *Shvetapaki*.

Table 1: Classification (*Varga*) of *Bala* according to different *Nighantus*.

S. No.	*Nighantus*	*Varga*
1.	*Dhanvantari Nighantu*	*Guduchyadi Varga*
2.	*Madanapala Nighantu*	*Abhayadi Varga*
3.	*Kaiyadeva Nighantu*	*Aushadhi Varga*
4.	*Raja Nighantu*	*Shatahwadi Varga*
5.	*Bhavaprakasha Nighantu*	*Guduchyadi Varga*
6.	*Priya Nighantu*	*Shatapushpadi Varga*

Table 2: *Rasa Panchaka* of *Bala* according to various *Nighantus.*

S. No.	*Rasa Panchaka*		*Nighantus*					
			D.N.	*M.P.N.*	*K.N.*	*R.N.*	*B. N.*	*P.N.*
1.	*Rasa*	*Madhura*	+	+	+	-	+	+
		Atitikta	-	-	-	+	-	-
2.	*Guna*	*Snigdha*	+	+	+	-	+	+
3.	*Virya*	*Shita*	+	+	+	-	+	+
4.	*Vipaka*	*Madhura*	+	+	+	+	+	+
5.	*Doshaghanta*	*Tridoshahara*	+	-	+	-	-	-
		Vatapittahara	-	+	-	-	+	+
		Kaphanashaka	-	-	-	+	-	-

Table 3: Varieties of *Bala* according to various *Samhita* and *Nighantu.*

S. No.	Types	Name	Latin name
1.	*Baladvaya* *(C. S.)*	*Bala* *Atibala*	*Sida cordifolia* (Linn.) *Abutilon indicum* (Linn.)
2.	*Balatraya* *(A. H.)*	*Bala* *Atibala* *Nagabala*	*Sida cordifolia* (Linn.) *Abutilon indicum* (Linn.) *Grewia hirsuta* (Vanb.)
3.	*Balachatustaya* *(B. N.)* *(K. N.)*	*Bala* *Atibala* *Nagabala* *Mahabala*	*Sida cordifolia* (Linn.) *Abutilon indicum* (Linn.) *Grewia hirsuta* (Vanb.) [*Sida veroniceafolia* (Lom.) or *Sida rhombifolia* (Linn.)]
4.	*Balapanchaya* *(P. N.)*	*Bala* *Atibala* *Nagabala* *Mahabala* *Rajabala*	*Sida cordifolia* (Linn.) *Abutilon indicum* (Linn.) *Grewia hirsuita* (Vanb.) *Sida rhombifolia* (Linn.) *Sida veroniceafolia* (Lom.)

[4]Morphology of *Sida* species

***Sida cordifolia* L.**

Sida corifolia (linn) syn. Country Mallow of Malvaceae family is widely distributed along with other species are common throughout the tropical and sub tropical plains all over India and Srilanka up to an altitude of 1050 m., growing wild along the roadside. It grows as wasteland weed. It is also known as the "Bala" in Hindi and Sanskrit. (Narayan et al., 1956) The plant name Bala is coined on the name of 'Parvati' (goddess of strength and beauty). The quantities are low, with less than 2% of ephedrine and pseudoephedrine found in the leaves of *Sida cordifolia*. Ephedrine is known to stimulate the central nervous system (CNS), and as such can enhance weight loss. Traditionally nutrition companies used plants such as *Ma-Huang* (Ephedra plant), because it contained relatively large amounts of ephedrine, in their weight loss products. However, since this product was banned in many countries including the USA and UK, they are now looking for alternatives. *Sida cordifolia*, with its ephedrine and pseudoephedrine has gained a lot of interest and is now sold by many of these companies (Ghosal et al., 1975).

Sida cordifolia is a small, erect, downy shrub. The leaves of the plant are chordate-oblong or ovate- oblong and fruits with a pair of awns on each carpel. Roots of the plant which constitute a drug are 5-15 cm long with few lateral roots of smaller size. The tap roots are generally branched at the tip. The outer surface of the root is off to greyish yellow. It is almost odourless with slightly bitter taste (Rangari et al., 1995).

Botanical description

Sida cordifolia grows well through the plains of India, especially, in damp climates. The shrub grows up to 0.75 – 1.5 meters in height. The root and the stem are stout and strong. The leaves are 2.5-7 cm long and 2.5-5 cm broad, with 7-9 veins. They are heart shaped, serrate and truncate. The flowers are small, yellow or white in colour, solitary and axillaries. The fruits are moong-sized, 6-8 mm in diameter. The seeds are called as *Bijabanda* in *Ayurveda*, are greyish black in colour and smooth. The plant flowers from August to December and fruiting occurs from October to January (Pole et al., 2006).

Country Mallow of Malvaceae family is widely distributed along with other species are common throughout the tropical and subtropical plains all over India and Srilanka up to an altitude of 1050 m., growing wild along the roadside.

Part Used: seed, leaves, Roots

Macroscopic Characters

Stems - stout and strong

Leaves - 2.5-7 cm long and 2.5-5 cm broad, with 7-9 veins.

Flowers - small, yellow or white in colour, solitary and

axillaries.
Fruits - moong-sized, 6-8 mm in diameter

Figure 1 root of sida cordifolia.

Seeds - greyish black in colour and smooth.

Figure 2 stem of sida cordifolia.

Figure 3 fruits of sida cordifolia.

Figure 4 flower of sida cordifolia.

Figure 5 seeds of sida cordifolia.

Figure 6 leaves of sida cordifolia.

Chemical Constituents - Ephedrine, Pseudoephedrine, Sterculic, malvalic and coronaric acid, Fatty acids, Saponin, Betaphen ethylamine, Hypaphorine, Ecdysterone, Indole alkaloid, Palmitic, stearic and β – sitosterol.

Therapeutic Uses

The Plant is alternative tonic, astringent, emollient, aphrodisiac etc.

- Bark - Considered as cooling. It is useful in blood, throat, urinary system related troubles, piles, phthisis, insanity etc.
- Seeds- The seeds as considered as aphrodisiac.
- Roots -It is regarded as cooling, astringent, stomachicand tonic, aromatic, bitter, diuretic.

***Sida cordifolia* physiological effect**

- It has a depressant rather than a stimulant effect on the

Central Nervous System

- May decrease both blood pressure and heart rate
- Has a hypoglycemic (blood sugar lowering effect)
- No real evidence to support its use as a weight loss supplement
- Increases pain tolerance
- Has an anti-inflammatory effect
- Possible antioxidant effect.[5]

Figur 7: Sida cordifolia.

Morphology of *Sida* species
Common Name : Heart -leaf *sida cordifolia*
Family : Malvaceae
Habit : Erect undershrub
Stem : Clothed with stellate and spreading hairs.
Leaves : Cordate-ovate or oblong, crenate-serrate.
Flowers : Yellow, axillary, solitary and clustered at endsof branches.
Fruits : Schizocarp transversely rugulose, marginsciliate, mericarps awned
Seeds : Ovoid or trigonous, brown or black.[6]

***Sida spinosa* L.**
Common Name : Prickly fanpetals
Family : Malvaceae
Habit : An erect, annual or perennial undershrub
Stem : 30 cm to 1 m tall, stellate pubescent.
Leaves : Leaves with filiform, 2-5 mm long stipules; blade 0.5-4 cm long, 0.3-2.5 cm broad, lanceolate to ovate, oblong or some whatorbicular, rounded at base, acute or obtuse atapex, serrate, usually cinereous on both surfaces.
Flowers : Axillary, solitary or 2-5 in fascicles in terminalbranches; white.
Fruits : Depressed, globose, pubescent above; mericarps 5, membranous, 2-3 mm long, trigonous, radially striately nerved, apically with 2, 0.5-0.8 mm long, divergent awns
Seeds : 1.5 mm long, glabrous, brown to black.[7]

Figure 8: Sida Spinosa.

***Sida acuta* Burm. f.**
Common Name : Common Wireweed
Family : Malvaceae
Habit : A shrubby annual or perennial herbUp to 1.5 m tall, with slender branches covered with minute, grey, stellate hairs. (4)
Leaves : Simple, alternate, 1.5-7.5 cm long and 0.5-2.5cm wide, lanceolate to linear, apex acute, margins serrate, base subcordate or rounded,minutely stellate-hairy on both surfaces, pinnately veined.
Flowers : Pale yellow or orange, axillary, solitary or clusters of 2-3.
Fruits : 5-6 mm in diameter, mericarps 5-11,2-2.5 mmlong with 2 awns 1-2 mm long, glabrous, darkbrown.
Seeds : Trigonous, smooth and black.[8]

Figure 9: Sida acuta.

***Sida cordata* (Burm. f.) Borss**
Taxonomic description: *S. cordifolia* is an erect perennial that reaches 50 to 200 cm (20 to 79 in) tall, with the entire plant covered with soft white felt-like hair that is responsible for one of its common names, "flannel weed". The stems are yellow-green, hairy, long, and slender. The yellow-green leaves are oblong-ovate, covered with hairs, and 3.5 to 7.5 cm (1.4 to 3.0 in) long by 2.5 to 6 cm (0.98 to 2.36 in) wide. The flowers are dark yellow, sometimes with a darker orange center, with a hairy 5-lobed calyx and 5-lobed corolla.[9]

Figure 10: Sida Chordate.

ATIBALA

Abutilon indicum* (L.) *Sweet.

Common Name: Country mallow

Family: Malvacae

Habit; An erect annual shrub, 1-2 m tall. velvety-pubescent. Circular-ovate or heart-shaped with coarselycrenate-serrate margins. The leaves are alternately arranged, and have long stalks andhave velvety, soft, pale hairs on them. Orange-yellow flowers, 2-3 cm across, occursolitary in axils, on long stalks. Circular in shape, consisting of 11-20 radiatinghairy carpels, brown when dry; each carpel isflattened, somewhat boat shaped.

Seeds : Ovate or sub-orbicular, dull black.[10]

Figure 11: Abutilon indicum.

Abutilon hirtum* (Lam.) *Sweet.

Common Name -Florida keys Indian mallow

Family-Malvaceae

Habit : Perennial herb or undershrub, 0.5-2 m tall.

Stem : Velvetty, branchlets viscid. Leaves : 4-18 cm long and broad, densely stellate, glutinous hairy on both sides mixed with simple hairs, more so on the nerves beneath; usually broadly ovate or ovate-cordate at base,acute to acuminate at apex, crenulate-dentate or serrate, yellowish, yellowish green to green.

Flowers : Orange-yellow or yellow; axillary, solitary.

Fruits : Schizocarp densely stellate, globose. Mericarps27 -30, acute at the back, oblong, 10-12 mmlong, 6-8 mm broad.

Seeds : Reniform, 2-2.5 mm across, with minute.[11]

Figure 12: Abutilon Hirtum.

NAGBALA

Nagbala is a single drug *Rasayana* mentioned in *Brihattrayi*. They had used *Nagbala* in both preventive aspect i.e *Rasayna Chikitsa* and curative aspect i.e. treatment of various diseases.

Also it is used as *Naimittik Rasayana* in *Kshata* and *Kshaya*. *Sushruta Samhita* mentioned it in *Sarvopaghatashamaniya Adhyaya* which suggests its property in healing diseases. *Charak Samhita* had mentioned its specific details about collection administration etc points towards its vital place in *Rasayana Chikitsa*. There are three plant species considered as *Nagbala* by different scholars *Sida spinosa*, *Sida humilis*, and *Grevia hirsuta*. From which *Sida humilis* is considered as *Nagbala* by Dr Chunekar Pande, Dr Balwant Singh Thakur and Dr Yadavji Trikamji Acharya. Also DR. Yadavji Trikamji Acharya has explained meaning of *Nagbala* as plant which moves like a snake on ground which can be correlated to *Sida humilis* as it is a prostrate herb. Here *Sida spinosa* and *Sida humilis* belongs to same genus and also they have some same alkaloids and constituents.[12]

Grewia hirsuta

Grewia hirsuta Vahl. is an undershrub, 1-3m tall, erect, fulvous hairy, belongs to family Malvaceae, which is distributed through Sub Himalayan tract upto 4500 h. Common through deciduous forests, is widely used medicinal plant. The genus Grewia hirsuta Vahl. belongs to the division Magnoliophyta, class Magnoliopsida, Order Malvales And family Malvaceae. Grewia hirsuta Vahl. is considered as one of the *Nagbala* species by Balwant Singh Thakur, Acharya Priyavratji Sharma which is commonly known as Gangeruki. The other 2 species are Sida spinosa, Sida humilis Cav. Which are also taken as a *Nagbala*.[13]

Figure 13: Grewia hirsute.

***Sida humilis* Cav.**

A trailing annual or biennial plant, with a cylindrical procumbent stem branched from near the base; branches erect, with a few scattered, stellate or simple hairs. Leaves stalked, roundish, acuminate, crenate-serrate, hairy on both surfaces; stipules linear lanceolate. Flowers axillary, solitary or twin, stalked; pedicels exceeding the leaves or sometimes shorter, articulated. Calyx 5-parted; segments triangular, very acute. Corolla straw-coloured, scarcely exceeding the calyx. Carpels 5, shortly bicuspidate, not reticulated on the surface.[14]

Urena lobata L.

Taxonomic description: A shrubby perennial, up to 2 m high. Leaves usually broader than long, up to 11.3 cm long, cordate, serrate or toothed, stellately hairy, roundish, angled; lobes generally acute or acuminate, varying in size and numbers. Flowers small, clustered in the axils; corolla 15 mm long, pink. Capsules pubescent, covered with blunt spines.[15]

Figure 14: Urena lobata.

Sida veronicaefolia

Nagabala (Sida Veronicaefolia) is a hairy herb with coarsely gray, brown colored hairy branches. Leaves are cordate, ovate and sparingly hispid with 6-14 cm length and 2-3.5 cm in width. Flowers are axillary, solitary, or borne in pairs or in small cymes. Color of flower is White, gradually turns yellow and brown color appear when they fully grown. Fruits are small sized and also yellow in color. Seeds are of brown color. Herbs bear the fruits and flower throughout the year.[16]

Figure 15: Sida veroinicaefolia.

MAHABALA

Sida rhombifolia

Sida rhombifolia is a small erect woody, very variable annual or perennial undershrub about 1.5 meters high with rough branches and stellate hairs. Leaves are very variable in shape up to 5mm by 18mm, short petioled, rhomboid-lanceolate to lanceolate, serrated towards the top, entire towards the base. The flowering and fruiting in the plant start from September to December. Flowers are yellow or white, axillary, solitary or in pairs. The leaves are reduced on the flowering branches. The fruits are depressed, globose, schizocarpic, enclosed within the calyx, separating into one-seeded indehiscent unit. Seeds are black and smooth.[17]

Figure 16: Sida rhombifolia.

Sida rhomboideia

Erect herb or sub shrubs 1–2.5 m high. Stem terete, minutely pubescent with small stellate hairs. Leaves obovate or suborbicular, rhomboid to lanceolate, truncate or rounded at base, subobtuse or acute at apex. Petiole stellate pubescent. Stipules equal, linear, slightly purplish. Flowers axillary, solitary. Pedicels 5–6 mm in flowers, to 25–35 mm in fruits, filiform, glabrous, articulated at about the middle. Calyx 7–9 × 5–6 mm,

campanulate, 10-ribbed at bas, 5-lobed, triangular, outer surface densely tomentose with minute stellate hairs, inside nearly glabrous, margins purplish. Corolla paleyellow; petals obliquely obovate, retuse or emarginate at apex, glabrous. Staminal column 2.5–3 mm long, antheriferous at apex. Styles 8–10; stigmas capitate, yellow. Schizocarp 3–4 × 3–3.5 mm; mericarps 8–10, 3–3.5 mm long, completely included in the calyx, indehiscent, trigonous with acute angles, apex beaked with a single, glabrous muticous process. Seeds 2 mm long, brownishblack, glabrous throughout.[18]

Figure 17: Sida rhomboidea.

DISCUSSION

The plant *Bala* is divided into many varieties according to different Samhitas and Nighantus. The drug is attributed to *Balya, Kantikarak, vrishya, ojovardhak, stambhan, brimhaniya, rasayan, shothohar* and *hridya* properties. Due to *Madhura Rasa, Madhura Vipaka, Snigdha, Pichhil Gunas,* it acts as *Balya*, *Vrishya*, *Ojovardhak*, *Brimhaniya* and *Rasayana*. The species *Sida cordifolia* contains ephedrine which is more specifically present in it than other species of *Bala*. It acts as an alternative tonic, antioxidant. It has depressant effect on nervous system. So it helps to decrease blood pressure and heart rate. So it is having *Hridya* properties, hypoglycemic, antiinflammmatory and aphrodisiac effect.

CONCLUSION

According to different *Samhitas* and *Nighantus* the plant *Bala* is having various types and varieties. *Acharya Charaka* has said two different varieties of *Bala* called as *Baladvaya* and it includes the plant *Bala* and *Atibala*. According to *Ashtang hriday bala has* three varieties as *Bala*, *Atibala* and *Nagbala* called as *Balatraya*. According to *Bhavprakash* and *Kaiydev Nighantu Bala* is mentioned in four varities called as *Balachatushtaya*. It includes *Bala*, *Atibala*, *Nagbala* and *Mahabala*. *Priyavat Nighantu* has said about 5 varieties of *Bala* including *Rajbala* additionaly. It is called as *Balapanchak*. The most commonly sold species is *Sida cordifolia* which is known as *Bala*. *Sida cordifolia* is having chemical constituent like ephedrine and it is more effective for medicinal use. *Sida cordifolia* is adulterated with other species like *Sida spinosa*, *Sida acuta*, *Sida cordifolia*, *Sida rhombifolia, Sida veroinicaefolia* etc.

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