

ETHNOMEDICINAL PROPERTIES OF BATHUKAMMA (TELANGANA STATE FLORAL FESTIVAL) FLOWERS

P. SARITHA* AND U. ANITHA DEVI

Department of Botany,
Government Degree College For Women,
KARIMNAGAR-505001 (TELANGANA) INDIA

*Corresponding Author

Email : saritha.perkari@gmail.com

Received : 29.08.2017; **Accepted** : 07.10.2017

ABSTRACT

Bathukamma is a floral festival of Telangana state in Peninsular India. It is a major festival celebrated by the Hindu womenfolk of the region. They make Bathukamma with colorful and beautiful flowers that grow exclusively in Telangana region. This festival is a cultural identity and a symbolic icon of Telangana people. The present study mainly focus on the ethnomedicinal properties of Bathukamma flowers and also to reveal the importance of less known plants used by tribal people who lived in rural areas before the evolution of urban culture. The present study helps to bridge between tribal and urban therapy systems. This study also helps to preserve biodiversity of the region.

Figures : 04

References : 07

Tables : 02

KEY WORDS : Bathukamma, Diversity, Ethno Medicinal Flowers, Flora, Heterogeneous Floristic Composition, Telangana,

Introduction

Once upon a time, there was a king named Dhramangada and his wife queen Satyavati in Chola dynasty used to rule South India. They had one hundred Sons and all of them had died in a war. After performing many pujas, prayers and rituals, his wife gave birth to Goddess Lakshmi, a baby girl. Baby Lakshmi survived besides many accidents during her childhood. Her parents named her Bathukamma. Bathuku means Life, Amma means Mother. So the meaning of Bathukamma is 'come back to life mother' and praying Goddess Sati (Parvati) to return. She was very beautiful, powerful and eternal. Thus, thereafter, all young unmarried women pray and worship Goddess Lakshmi to attain bliss and happiness. They pray to get married with good husbands as per their wish and teach young girls how to take care and love their family members, and be great

women, respect elders and love people around them, and also guide to their younger ones. Since then, young girls in Telangana region celebrate Bathukamma festival, share, and transfer cultural values to their younger generation. However, this festival belongs to the women folk of Telangana region. Men and children participate with lot of interest and enthusiasm in this festival.

Apart from the above said story, there are some myths behind this festival. According to one myth, Goddess Gauri killed 'Mahishasura' the demon after a fierce fight. Due to fatigue after the fight, she went to sleep on the day of 'Ashvayuja Padyami'. The devotees prayed her to wake up and she woke up on the Dasami the tenth day. Because of this, the festival is celebrated for nine days beginning from the Padyami of the month of Ashvayuja. Another myth is that this Bathukamma festival is also celebrated to respect Goddess

ACKNOWLEDGEMENTS : The authors are grateful to dynamic Principal Dr. (Mrs.) T. Srilaxmi Garu, Vice Principal G.Shankar Garu, Government Degree College For Women, Karimnagar, Telangana. Our gratitude to Mr. T. Papa Rao, Mr. Kishan Reddy. The faculty members of our department have been very kind enough to extend their help at various phases of this research.

TABLE-1: 9 Days Name of Bathukamma and Naivedyam Food

Day	Name of Bathukamma	Naivedyam/Food
The first day of the festival falls on Mahalaya Amavasya, Bhadrapada Amavasya also known as Pethara Amavasya in Telangana region.	Engili pula Bathukamma	Nuvvulu(Sesame seeds/til) with biyyampindi(rice flour) or nookalu(coarsely ground wet rice) or just the mixture of sesame seeds and wet rice
The second day is called Atkula Bathukamma, it falls on the Padyami(first day) of Ashwayuja Masam(Navaratri Kalasha Sthapana)	Atukula Bathukamma	Sappidi pappu(Bland boiled lentils), bellam(jaggery), and atkulu (flattened parboiled rice)
The third day of Bathukamma falls on Preethi Vidiya/second day of Ashwayuja Masam.	Muddapappu Bathukamma	Muddapappu (softened boiled lentils), milk and bellam(jaggery)
The fourth day falls onSindhura Thidiya Gauri/third day of Ashwayuja masam.	Nanabiyyam Bathukamma	Nananesina biyyam(wet rice), milk, and bellam(jaggery)
The fifth day falls on the chathurdi/fourth day of Ashwayuja masam.	Atla Bathukamma	Uppidi pindi atlu(pan cakes made from wheatlets), or Dosa
The sixth day falls on the Lalita Panchami/fifth day of Ashwayuja masam.	Aligina Bathukamma (Not prepared Bathukamma)	No food offering is made.
The seventh day falls on the Durga Sashti/sixth day of Ashwayuja masam.	Vepakayala Bathukamma	Rice flour shaped into the fruits of Neem tree is deepfried.
The eight day falls on Durga Saphthami/seventh day of Ashwayuja masam.	Vennamuddala Bathukamma	Nuvvulu(sesame), Venna (Butter) or ghee (clarified butter), and bellam (jaggery)
The ninth day of Bathukamma is celebrated on Durga Ashtami/eight day of Ashwayuja masam, and coincides with Durgashtami.	Saddula Bathukamma	Five types of cooked rice dishes: perugannam saddi (curd rice), chinthapandu pulihora saddi(tamarind rice), nimmakaya saddi (lemon rice), kobbara saddi(coconut rice) and nuvvula saddi(sesame rice)

ETHNOMEDICINAL PROPERTIES OF BATHUKAMMA (TELANGANA STATE FLORAL FESTIVAL) FLOWERS 293

Parvati who is a passionate lover of flowers. Wishing her to bring back, women present her flowers, make pyramid shaped turmeric idol of the Goddess and put it on the top of the Bathukamma and sing, and dance around the Bathukammas.

Materials and Methods

The present survey has been carried out in different areas mostly rural areas of Karimnagar District of Telangana state during 2015-16 to 2016-2017. The plants flowers were identified with the help of district flora of Karimnagar and photographic collection has been done for the documentation. The main aim of the present study is to focus on the diversity of Bathukamma Flowers for further utility and conservation. These flowers are known to be used for the treatment of various diseases.

Soil of Telangana

Soil plays a major role in determining the sustainable productivity of an agro ecosystem. Telangana newly formed state of India is situated on the Deccan Plateau in the central stretch of the eastern seaboard of the Indian Peninsula in between 15.0° to 19.9° N latitude and 77.25 to 81.8° E longitude.

Soils in Telangana state mostly fall under *Alfisols*, *Vertisols* and *Inceptisols* soil orders. The grey area signifies the soils, which may not have acute deficiency of a nutrient, but crops respond to application of respective nutrient in these soils.

Significance of Bathukamma

Over the years, this festival has become a symbol of Telangana culture and identity. This festival is celebrated as per Telugu version of Hindu calendar in the Bhadrpada Amavasya, also known as Mahalaya Amavasya, usually in September–October of Gregorian calendar. As mentioned earlier, Bathukamma is celebrated for nine days during Durga Navratri. It starts on the day of Mahalaya Amavasya and the 9-day festivities will culminate on “Saddula Bathukamma” or “Pedda Bathukamma” festival on Ashwayuja Ashtami, popularly known as Durgashtami, which is two days before Dussehra festival which is celebrated nationwide in India every year. There is another sequence of 9 days pre Bathukamma celebrations called Boddemma before actual Bathukamma begins. Boddemma celebrations mark as the ending of Varsha Ritu (Monsoon season) whereas Bathukamma festival indicates the beginning of

Sharada or Sharath Ritu (Autumn season).

The monsoon rains usually bring plenty of water into the ponds and tanks of Telangana and it is the time when wild flowers bloom in various vibrant colors across the uncultivated and barren plains of the region. People collect flowers such as *Celosia* (Gungu puvvulu), Marigold (Banthi puvvulu), Chrysanthemum (Chamanthi puvvulu), Indian Lotus, *Cucurbita* leaves and flowers (Gummadi), *Cucumis sativus* leaves and flowers, Trachyspermum ammi, Katla, Teku flowers, etc., from wild plains. These flowers bloom in various colors in this season all across uncultivated and barren plains of the region.

Preparation of Bathukamma

Preparing a Bathukamma is a folk art. Women start preparing Bathukamma from the afternoon. They cut the flowers leaving the little length base, some dip Gunugu (*Celosia*) flowers in various vibrant colours, some scented and arrange them on a wide plate called Thambalam spread with big leaves, and stack them up in a conical mound, filling the cone with leaves and stems of the flower stalks, decorated with a lotus or pumpkin flower on top of the stack along with Gouramma (a symbolic idol of Gowri made of turmeric). One interesting aspect of the preparation of the flower arrangement is that the arrangement usually floats in water for some time, and the arrangement is not disassembled until it drowns in water. It is a beautiful flower stack arranged in seven concentric layers in the shape of temple gopuram (pyramid). The flowers used in the making of Bathukamma are unique and available only in that festival time. Most of these flowers have significant value of medicine.

During celebrations it is a common sight to see that every front courtyard of houses cleaned, sprayed with cow dung mixed with water and beautifully decorated with colorful muggu (Rangoli) made with rice flour mixing with different colors into it. For five days women make small pyramid shaped cow dung, decorate them and put them in the middle of front courtyard. During these days of celebrations, especially in the evening women wear traditional pattu (silk) sarees, wear jewellery and bring their own Bathukammas with a deepam (lamp) on top of it, gather and sing devotional songs while making circles around Bathukammas. Later they distribute sweets among themselves.

TABLE-2 : Ethnomedicinal properties of (Telangana State Floral Festival) Bathukamma Flowers

Latin Name	Family	Habit	Vernacular Name	Medicinal Uses
<i>Cassia auriculata</i>	Caesalpinaceae	H	Tangedu, Telangana's State flower	Anti-Diabetic, Laxative, Asthma, Anti-Cancer, Rheumatism, Lepracy, Ulcers, Skin diseases, Conjunctivitis
<i>Cucurbita maxima</i>	Cucurbitaceae	C	Gummadi, pumpkin	Aphrodisiac, Anti-inflammatory, stimulent, diuretic
<i>Tagetes erecta</i>	Asteraceae	H	Banthi	Anti-Bacterial, Anti-Septic, Antibiotic, Anti-Depressant, Anti-Fungal, Anti-Inflammatory, Anti-Parasite, Healing, Diuretic, Fungicide, Hypotensive,
<i>Hibiscus rosasinensis</i>	Malvaceae	S	Mandaram, Chinna Rose	Laxative, Cough, Syphilis, Gonorrhoea, Burn, Ipecia, Urinary diseases, Psychiatric ailments, Hair Loss, Leucorrhoea, Regular Periods, Cancer
<i>Impatiens balsamina</i>	Balsaminaceae	H	Gorinta, Rose Balsam	Antibiotic activity against Fungi and Bacteria, Snakebite
<i>Gomphrena globosa</i>	Amaranthaceae	H	Pokabanthi	Asthma, Bronchitis, Leucorrhoea, Nocturnal Weeping of Children and to soothe sore eyes
<i>Ipomoea nil</i>	Convolvulaceae	C	Katlapulu	Hermaphrodite
<i>Cosmos bipinnatus</i>	Asteraceae	H	Daisy	Anti-genotoxic, Anti-oxidant
<i>Celosia argentea</i>	Amaranthaceae	H	Kodijuttu Poovulu, Plumed Cockscomb	Bloody stool. Haemorrhoid bleeding, Uterine bleeding, Leucorrhoea and Diarrhea, Blurred Vision, Hepatic Fever, Ulcers, TB, Snake Bite, Eczema, Colic.

ETHNOMEDICINAL PROPERTIES OF BATHUKAMMA (TELANGANA STATE FLORAL FESTIVAL) FLOWERS 295

Latin Name	Family	Habit	Vernacular Name	Medicinal Uses
<i>Celosia cristata</i>	Amaranthaceae	H	Cockscomb	Piles, Headache, Wounds, Dysentery, Cataract, Diarrhea, Herpes, Bloody stool, Leucorrhoea, Opthomalic, Uterine bleeding,
<i>Chrysanthemum indicum</i>	Asteraceae	H	Chamanthi	Angina, High blood pressure, Type 2 diabetes, Fever, Cold, Headache, Dizziness and Swelling
<i>Nelumbo nucifera</i>	Nymphaeaceae	H	Lotus	Stop Bleeding, Diarrhoea, Diuretic, Cardiac Tonic, Abdominal Cramps, Bloody Discharges, Gastric Ulcers, Haemolysis
<i>Tagetes patula</i>	Asteraceae	H	Turkabanthi, French marigold	Diuretic, sedative, cough, dysentery
<i>Nerium odorum</i>	Apocynaceae	S	Ganneru	Heart, Fever, Parasites, Skin diseases, Eye diseases, Wounds, Asthma, Hemorrhoids, Joint pains, Itching, Leprosy, Scorpion sting, Snake Bite
<i>Hybiscus myrcanhtus</i>	Malvaceae	H	Nitya malle	Hypoglycemic agent, Antiviral, Anti-Microbial
<i>Crossandra infundibuliformis</i>	Acanthaceae	H	Kanakambaram	Anti-Bacterial, Anti-Fungal, Anti-Candidal, Aphrodisiac
<i>Mirabilis jalapa</i>	Nyctaginaceae	H	4 ^o Clock plant	Anti-Inflammatory, Anti-viral
<i>Rosa indica</i>	Rosaceae	S	Gulabi	Anti-Inflammatory, Antiseptic, Asthma, Anti-bacterial, Ulcers, Liver problems.
<i>Barleria prionitis</i>	Acanthaceae	H	Vajradanthi, Mulla Goranta Chettu	Toothache, Mouth Ulcers, Oedema, Gout, Sexual igour. Urinary affections, Instomach disorders, Pimples, Asthma.

Latin Name	Family	Habit	Vernacular Name	Medicinal Uses
<i>Catharanthus roseus</i>	Apocynaceae	H	Billaganneru, Rosy Periwinkle	Cancer, Blood pressure, Leukemia, Diabetes, Asthma, Bleeding Hemorrhoids, Healthy Skin, Dysentery, Diarrhoea, Lung Cancer, Acne, Fatigue, Eczema.
<i>Clitorea ternatea</i>	Fabaceae	C	Shankpushpi	Anti-bacterial, Improves Memory, Mental Fatigue, Female reproductive disorders
<i>Curcuma longa</i>	Zingiberaceae	H	Turmeric, Pasupu	Anti-Cancer, Anti-Inflammatory, Various Skin Diseases, Digestive Problems, Blood Purifications.
<i>Luffa acutangula</i>	cucurbitaceae	C	Ridged gourd/ Beera Puvvu	Anti-Inflammatory, laxative, diuretic, Headache, Cold, Antihaemorrhagic, Colic
<i>Trachyspermum ammi</i>	Apiaceae	H	Ajwain/Vama Puvvu	Indigestion, Flatulence
<i>Tectona grandis</i>	Verbenaceae	T	Teak	Urine excretion, Bronchitis, Laxative, Piles, Leucoderma, Dysentery, Bburning pain in Stomach & Liver, Leprosy, Eczema, Scabies

Rituals of Bathukamma

Bathukamma represents cultural spirit of Telangana. This festival brings women folk of the village together and builds a sense of oneness within the family and the society. This is celebrated before the Dushehra festival in every part of the state. As prelude to the start of the nine-day long festivities, the beautiful floral festival begins with Engili Poola Bathukamma on the first day that is no-moon day before Dushehra with much pomp and gaiety across the state and ended with the Saddula Bathukamma.

As mentioned briefly about celebrations

earlier, for the 9 days particularly in the evening, women especially young girls gather in large numbers with their Bathukammas in open areas of their locality. All women will form a circle around the Bathukamma and start singing folk songs by clapping their hands and revolving around the Bathukamma, synchronizing steps and claps in unison provide a splendid look to the festivities. Women seek good health, prosperity and happiness for their families. The songs are to invoke the blessings of various goddesses. By principle, the rendition end with any one of the following three tributes Uyyaala Chandamama or Gouramma - Each day has a name mainly signifying

ETHNOMEDICINAL PROPERTIES OF BATHUKAMMA (TELANGANA STATE FLORAL FESTIVAL) FLOWERS 297



Figs.1 & 2 : Preparation & Celebration of Bathukamma in the College by Students & Botany Staff

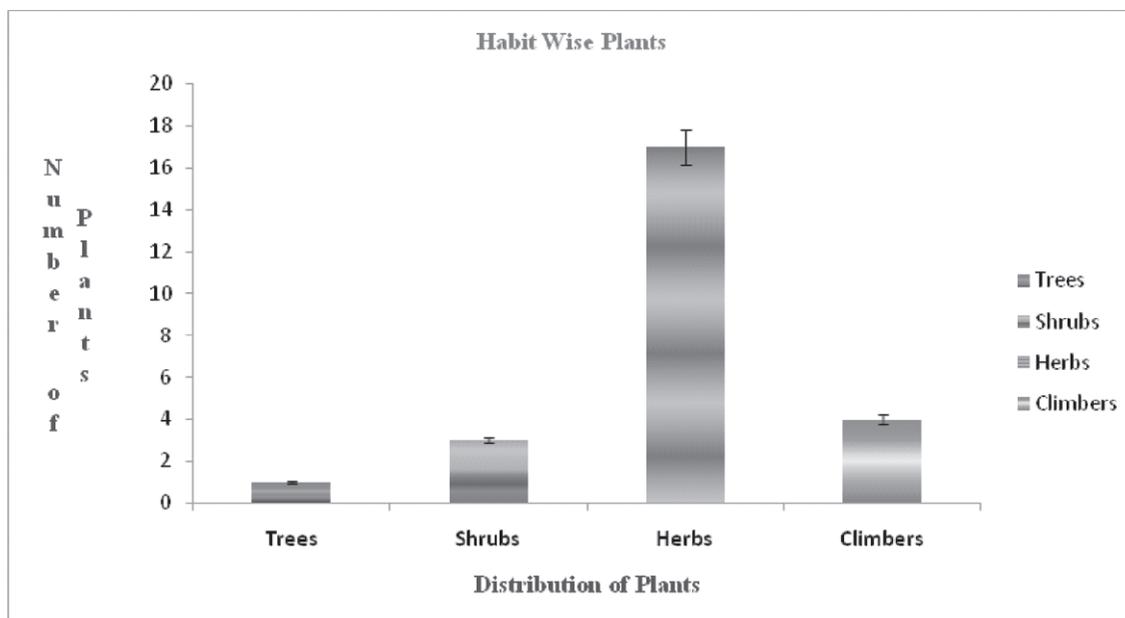


Fig.3: Distribution of plants-category wise

the type of “naivedyam” (food offering) offered. Most of the naivedyam offered are very simple to prepare, and usually young children or young girls are mainly involved in the preparation of the offerings for the first eight days of the festival. The last day, called saddula Bathukamma is when all the women take part in the preparation. Following is the list of names for each day and the naivedyam offered on that day.

Celebrations

First day starting on Amavasya half moon day they clean the area in front of their house vakili (porch), they spray water with cow dung and draw the muggu (Rangoli) with rice powder or white wash. The first five days Bathukamma is prepared with cow dung five small lumps like cups and arranged in front of their main door in middle placing one four surrounding. Women start preparing Bathukamma from the afternoon. They cut the flowers leaving the little length base, some dip in colors, some scented and arrange them on a wide plate called tambalamu, and stack them up in a conical mound, decorated with a pumpkin flower on top of the stack. Customarily the flowers used are Celosia, Tanner’s Cassia, Marigold, Chrysanthemum, Indian Lotus, Cucurbita, Cucumis, Ipomoea, Luffa, Tridax and Ajwain. To

make flowers look brighter and attractive usage of natural colors and scents is also prominent.

All young girls and women play in circle, clapping together and singing songs narrating stories of historical and legends and god and goddesses. For one whole week, they make small ‘Bathukammas’, play around them every evening and immerse them in a nearby water pond. On the last day, men folk of the house go into the wild plains and gather the flowers like ‘gunuka’ and ‘tangedu’. They bring home bagfuls of these flowers and the entire household sits down to arrange them in stacks. The procession is extremely glittering with aptly dressed and decorated women and “Bathukammalu”. Songs of folklore are sung in chorus throughout the procession and the streets resonate with them.

Finally, when they reach the water pond the ‘Bathukammalu’ are slowly immersed into water after another round of playing and singing. Then they share the ‘maleeda’ (a dessert made with sugar or raw sugar and corn bread) sweets amongst the family members and neighborhood folks. They return to their homes with empty ‘taambaalam’ singing songs in praise of Bathukamma. The songs of Bathukamma echo in the streets until late night during the entire week.

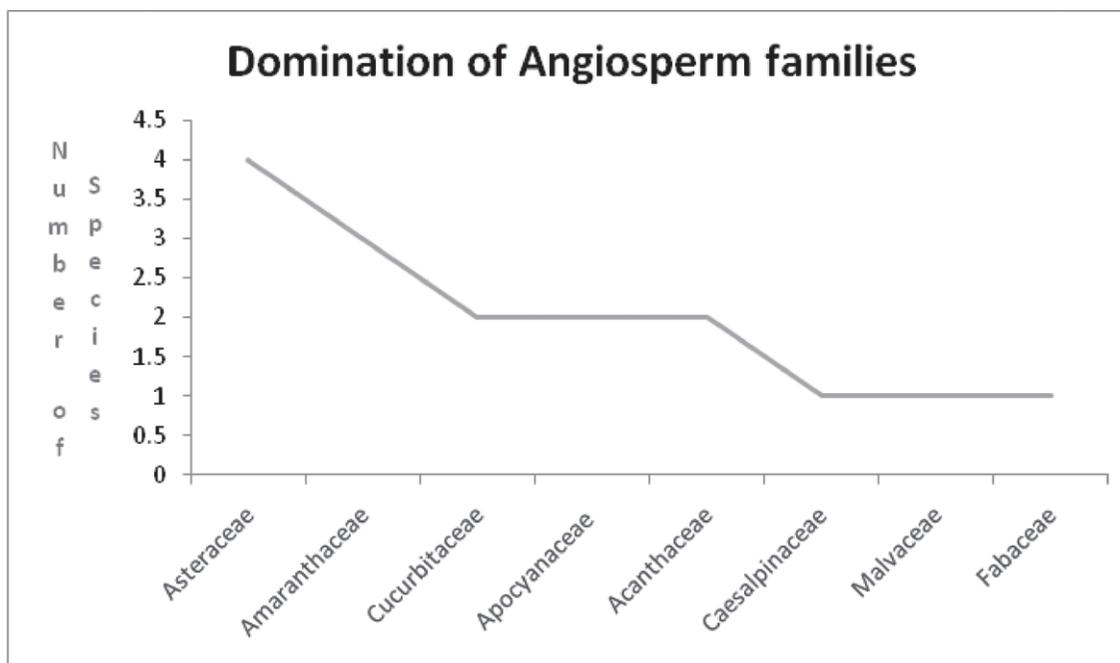


Fig.4: Major contribution of Angiosperm families to the medicinal plants of Bathukamma

Results and Discussion

During the survey, 25 flowers belong to 16 families of Angiosperms were identified with medicinal uses. Most dominant families are Asteraceae, Amaranthaceae and Followed by Cucurbitaceae, Apocyanaceae and Acanthaceae. The plant genera which is known as Telangana state flower is *Cassia auriculata*(Thangedu). The flowers are used for treatment especially in Ayurvedic Medicine. *Cassia* have been shown to posses antibacterial, antifungal^{1,5}, antiprotozoal^{4,6}, antidiabetic activities³ and larvicidal activity against mosquito species^{2,7}.

The various ailments treated appeared to be common ailments like allergic disorders, cold, cough, respiratory disorders, digestive, skin and urinary disorders. The human life on this planet very much depending upon the existing floral and faunal diversity. The factors contributing to the habitat destruction and consequent loss of biodiversity are Increasing population, environmental pollution, habitat loss, climatic change and introduction of exotic species.

Bathukamma flowers have medicinal value and curative role in local ailments. They are a great

source of home remedies. Thousands of Bathukammas are immersed in the pond or tank, the concentration of the medical properties increases in water leading to the death of bacteria, fungi and protozoan's. Because of which water-borne diseases such as cholera, typhoid and diarrhea along with some skin diseases could be prevented.

The petals of these flowers are not only medicinal (rich in anti oxidants) *i.e.* *Hibiscus*, *Nelumbo*, enhance the antimicrobial cleansing the water and make the good environment. The Bathukamma flowers play major role in reducing water pollution. We organized a workshop in our college to bring awareness among the students about the culture, medicinal importance of Bathukamma flowers.

Conclusion

Mr. Kalvakuntla Chandrashekar Rao garu, Chief Minister of Telangana proclaimed the festival as Telangana State festival, since it is the festival that helped in achieving Telangana by showing the world the traditional grandeur of Tealngana. Government of Telangana is celebrating this festival

300

with joy and gaiety from 2014 as State Festival. Kalvakuntla Kavitha garu, a parliamentarian, from Nizamabad, who heads TRS's cultural wing Telangana Jagruthi that has been striving for the restoration of local culture and traditions, wants to showcase Bathukamma across the world. Conceived as being part of marketing Telangana state, Kavitha garu, simultaneously, embarking on a worldwide tour of eight countries *i.e.* US, UK, Denmark, Australia, New Zealand, Dubai, Bahrain and Kuwait.

P. SARITHA AND U. ANITHA DEVI

Telangana state celebrates a Floral Festival to remember the importance and treating the Nature as the goddess with a hope that 'protection of environment is protecting our selves'; the festival is called as 'Bathukamma, women of the Telangana festival. Telangana festival Bathukamma has entered into Guinness book of world records On October 8th 2016 about 9,292 women participated in the festival at L. B. stadium, Hyderabad.

References

1. ABO. K.A., ADEYEMI, A.A. AND JEGEDE, I. A. (2000) Spectrophometric estimation of anthroquinine content and antimicrobial potential of extracts of some *Cassia* species used in Herbal Medicine. In *Ibadan. Sci. Forum* Vol 3 (2) : 57 – 63.
2. GEORGES, K., JAYAPRAKASAM, B., DALAVOY, S.S. AND NAIR, M.G. (2008) Pestmanaging activities of plant extracts and anthraquinones from *Cassia nigricans* from Burkina Faso. *Bioresour. Technol.* 99(6): 2037 – 2045.
3. JALALPURE, S.S., PATIL, M.B., PAI, A., SHAH, B.N. AND SALAHUDDIN, M.D. (2004) Antidiabetic activity of *Cassia auriculata* seeds in alloxan-induced diabetic rats. *Nig. J. Nat. Prod. Med.* 8: 22 – 23.
4. MOO-PUC, R.E., MENA-REJON, G.J., QUIJANO, L. AND CEDILLO-RIVERA, R. (2007) Antiprotozoal activity of *Senna racemosa*. *J. Ethnopharmacol.* 112: 415 – 416.
5. NEBEDUM. J., AJEIGBE. K., UBA. C. AND OFUSORI. D. (2009) Comparative study of the ethanolic extracts of four Nigerian plants against some pathogenic microorganisms. *Res. J. Med. Plants* Vol 3; 23 – 28.
6. OBODOZIE, O.O., OKPAKO, L.C., TARFA, F.D., ORISADIPE, A.T., OKOGUN, J.J., INYANG, U.S., AJAIYEBOBA, E.O. AND WRIGHT, C.W. (2004) Antiplasmodial principles from *Cassia nigricans*. *Pharmaceut. Biol.* 42: 626 – 628
7. YANG, Y., LIM, M. AND LEE, H. (2003) Emodin isolated from *Cassia obtusifolia* seed shows larvicidal activity against three mosquito species. *J. Agric. Food Chem.* 51: 7629 – 7631.