The Phases of Flower in Sangam Tamil Literature

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Abstract

A flower is the reproductive part of flowering plants. Within the flowering stage of flower had different phases like Arumbu / Bud, Mottu / Tender flower Bud, Mugai / Opening bud, Malar / Flower blossom, Alar / Full-blown flower blossom, Vee / Flower drying and Semmal / Faded flower in Sangam Tamil literature. The Sangam Tamil literature was accompanied of Tamil scholars and poets that, according to phases flower are indicated in Thirukkural, Narrinai, Purananuru, Kuruntokai, Silappatikaram, etc., This review is more useful to researchers for understanding the floral scent properties relation to phases of flower and associated with releasing dynamics for fragrant / scent out of flower.

Keywords: Phases of flower, Sangam literature, Flower, Flower fragrant and floral scent.

Introduction

A flower is the reproductive part of flowering plants (Angiosperms). The first step of the transition is the transformation of the vegetative stem primordia into floral primordia. This occurs as biochemical changes take place to change cellular differentiation of leaf, bud, and stem tissues into tissue that will grow into the reproductive organs. Growth of the central part of the stem tip stops or flattens out, and the sides develop protuberances in a whorled or spiral fashion around the outside of the stem end (Greyson, 1994). These protuberances develop into the sepals, petals, stamens, and carpels. Once this process begins, in most plants, it cannot be reversed, and the stems develop flowers, even if the initial start of the flower formation event was dependent on some environmental cue (Leins and Erbar, 2010). Once the process begins, even if that cue is removed, the stem will continue to develop a flower. In the flowering phase of flowering was started bud stag to dried flower stage in ancient Tamil literature depicted in Fig 1.

Different Phases of Flower and Characters

- Arumbu (Arumbu) / Bud: A small swelling in the plant stem consisting of overlapping the immature leaves or petals. In botany, a bud is an undeveloped or embryonic shoot and normally occurs in the axil of a leaf or at the tip of a stem. Buds may be specialized to develop flowers or short shoots or may have the potential for general shoot development.
- Mottu (GLDTL'G) / Tender Flower Bud: These stage sepals to ring a flower. Not completely open calyxes, petals are spreading, pubescent of flowers but not open.

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Figure 1: Different phases of flower in Tamil literature (Adopted from Xiao-Wei Qin et al., 2014)

- Mugai (முகை) / Opening Bud: Semi opens of sepals and petals. The light color of the flower, in this stage, also flowers not open fully.
- Malar (LEONT) / Flower Blossom: Completely open petals, observable pistils, and stamens. It's a growing stage of flower parts.
- Alar (அலர்) / Full Blown Flower Blossom: Fully matured all parts of the flower. To

visualize full flower color and parts. This stage is fully developed the reproductive parts of the flower.

- Vee (a) / Flower Drying: Petals and calyxes withered and colors are a little dull compared to the previous stage. They are simply called as a willing stage of flowers.
- Semmal (@#ibDob) / Faded Flower: Petals are dried, some flowers are dropped out. This stage is which would either fall or become fruit.

Tamil literature has a rich and long literary tradition spanning more than two thousand years. The oldest extant works show signs of maturity, indicating an even longer period of evolution. In Tamil literature works in was done several poetry to touch in and around the human life in olden days. Such things flower is beautiful in everyday human life. Moreover, the flower stages to indicate as Thirukkural, Narrinai, Purananuru, Kuruntokai, Silappatikaram, etc.,

Stage of flower	Present in	Represent Tamil and English
Arumbu / Bud	Thirukkural / திருக்குநள் - 1227	காலை அரும்பிப் பகலெல்லாம் போதாகி மாலை மலரும் இந்நோய். Budding at dawn burgeoning all day this disease blooms in evening gay
Mottu / Tender Flower Bud	Narrinai / நற்றிணை - 115	மனை நடுமௌவலொடு ஊழ்முகை அவிழக் கார் எதிர்ந்தன்றால் காலை காதலர் The matured buds time to open In the jasmine at centre of home
Mugai/ Opening Bud	Thirukkural / திருக்குறள - 1274	முகைமொக்குள் உள்ளது நாற்றம்போல் பேதை நகைமொக்குள் உள்ள தொன்றுண்டு. Like scent in bud secrets conceal in the bosom of her half smile
Mugai / Opening Bud	Narrinai / நற்றிணை - 59	நுண்முகை அவிழ்ந்த புறவின் பொறைதலை மணந்தன்று உயவுமார் இனியே Delicate buds (முகை) are opend up in the forest, She has been patient with feel sad an delay more
Malar / Flower Blossom	Purananuru / புறநானூறு - 105	தடவுவாய்க் கலித்தமா இதழ்க்குவளை வண்டுபடு புதுமலர்த் தண்சிதர் கலாசப் Big ponds in big water lilies Bees swarming the fresh flowers (மலர்) in cool water get mixed
Alar / Full Blown Flower Blossom	Purananuru / புறநானூறு - 96	அலர் பூந்தும்பை அம்பகட்டுமார்பின், திரண்டு நீடுதடக்கை என் இளையோற்கு Wearing blossomed leucasaspera flower (அலர்) garland in beautiful chest Stong long hand in the son of my lord
Vee / Flower Drying	Narrinai / நற்றிணை - 191	சீறு வீஞாழல் தேன்தோய் ஒள்இணர் நேர்இழை மகளிர்வார் மணல் இழைத்த Small flowers of tigerclaw tree was honey filled bunches Perfect women created sand dolls

 Table 1: Different phases of the Flower as Represent in Tamil Literature

		உதிர் பூலுஞ் செம்மலினொதுங்கினர் கழிவோர்
Semmal /	Naadukaan /Condom	முதிர்தேம் பழம்பகை முட்டினு முட்டும்
Faded Flower	நாடுகாண்காதை	Man walked secluded bath by dropped the flowers
		Honey drooped jack fruit to enmity hostile the man"

Discussion

The Sangam Tamil Literature mentions a lot of flowers. The flowers are not simply mentioned; they had known the functional values, importance, and phases based on their 'Tamil grammatical content.' This may be a little tough to understand if you are not a Tamil language, for this particular grammar - called the Content Grammar (Porul Ilakkanam) is unique for Tamil literature. Thus the mentioning of flowers in Sangam Tamil literature is not to add simply in the format of the poem as they well explore the natural beauty of the land. They have very deep functional meanings, especially in phases of the flower. However, the volatile compounds of different flowers in different phases have severed indications that to determine the time of harvest, quality of essential oil and flavor of flowers (Sanimah et al., 2008; Stashenko et al., 1995).

Conclusion

The flower is an important ornamental, and the floral scent properties associated with flower phases. The above study is much more important to understand the physiology phases within the flower stage and dynamic combination of scent / fragrant out in the flowers. The Sangam Tamil literature mentions the flower phases of transcending knowledge to transfer for the next generations.

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