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# **Exploring Botanical Nomenclature in Tamil Culture: Linguistic Insights into Plant Names**

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#### **Abstract**

This research delves into the intricate world of botanical nomenclature within Tamil culture, shedding light on the linguistic transparency and cultural significance embedded within plant names. Through an analysis of five diverse plant species, including *vēlipparutti* (Pergularia daemia), *pīļai* (Aerva lanata), *tumpai ceţi* (Leucas aspera), *āṭātōṭai* (Justicia adhatoda), and the *toṭṭār curuṅki* (Mimosa pudica), this study explores the factors contributing to the naming of plants and the transparency of these names in the Tamil language. Each plant's name reflects not only its physical attributes but also its cultural context, highlighting the rich tapestry of traditions and observations woven into Tamil botanical terminology. The transparency of plant names in Tamil is a remarkable feature that facilitates communication and understanding among speakers. These names often provide vivid descriptions of the plants, allowing individuals to easily identify and recognize them in their natural environment. Through linguistic analysis and cultural interpretation, this research provides valuable insights into the intricate relationship between language, culture, and nature in the Tamil-speaking regions.

**Keywords:** Botanical nomenclature - linguistic transparency - *vēlipparutti* (Pergularia daemia) - *pīļai* (Aerva lanata) - *tumpai ceţi* (Leucas aspera) - *āṭātōṭai* (Justicia adhatoda) - *toṭṭāṛ curuṅki* (Mimosa pudica)

## 1.0. Introduction

Botanical nomenclature is not merely a system of assigning names to plant species; it is a reflection of the intricate relationship between human societies and the natural world. The

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relationship is vividly expressed in the rich tapestry of Tamil culture, where plant names are imbued with layers of linguistic nuance, cultural significance, and ecological insight. In this article, we embark on a journey through the verdant landscape of Tamil Nadu, exploring the linguistic insights and cultural revelations embedded within the names of five distinct plant species: *vēlipparutti* (Pergularia daemia), *pīļai* (Aerva lanata), *tumpai ceți* (Leucas aspera), *āṭātōṭai* (Justicia adhatoda), and *toṭṭār curuṅki* (Mimosa pudica). Each of these plants not only holds botanical significance but also serves as a window into the rich tapestry of Tamil heritage, where names are crafted with precision to reflect the plant's characteristics, habitat, and traditional uses. Through a comprehensive analysis of these plant names, we aim to unravel the linguistic and cultural intricacies that shape Tamil botanical terminology, providing valuable insights into the dynamic interplay between language, culture, and biodiversity in the Tamil-speaking regions. This article delves into the fascinating world of Tamil botanical nomenclature, where every plant name tells a story steeped in tradition, observation, and reverence for the natural world.

## 1.1. vēlipparutti (Pergularia Daemia)

Pergularia daemia, commonly known as trellis-vine, is a perennial vine belonging to the family Asclepiadaceae. This plant has a long history of traditional use in treating various ailments, not only in India, but also in some other parts of the world (Odugbemi et al., 2006). In Tamil, it is referred to as *vēlipparutti*. Other Tamil names for this plant include *uttamamākāṇi*, *uttamakkaṇṇikai*, *accāṇi mūli*, and *uttamatāļi* among others. The Tamil lexicon has documented a total of 28 different names for this plant from various Tamil literary works.

The name  $v\bar{e}li$  parutti is the combination of  $v\bar{e}li + paruti$  where  $v\bar{e}li$  signifies fence and parutti denotes cotton plant.  $v\bar{e}li$  parutti commonly found growing on fences and is characterized by its climbing nature and fruit-bearing capabilities. Upon reaching maturity, the fruits of the  $v\bar{e}lipparutti$  burst open, releasing long, white fibrous seeds that are dispersed by the wind, allowing the plant to spread to nearby areas.

The term *parutti* typically refers to the cotton plant, a commercially cultivated crop in fields, with *panju* being the term specifically for cotton known for its distinctive white color. Due to the similarity in appearance and lightweight fiber resembling cotton, it aptly referred to Pergularia daemia as *vēli parutti* a name that literally translates to "cotton plant on the fences."

This name highlights the plant's tendency to grow on fences and its resemblance to cotton, emphasizing its familiar presence in the local environment.

### 1.2. pīļai (Aerva Lanata)

Aerva lanata, also known as erva lanata or mountain knotgrass, stands as a notable botanical specimen within the family Amaranthaceae. This plant occasionally displays flowering behavior within its initial year of growth (Wikipedia: 2023).

Thriving across the plains of India, Aerva lanata is recognized as a common weed boasting distinctive characteristics. Its roots emit a fragrance reminiscent of camphor, while the dried flowers, resembling soft spikes, are commercially known as Buikallan and Boor (Ibid). Culturally, it holds significance among the ten sacred flowers of Kerala, earning a place within the revered Dasapushpam (Ibid).

This plant typically reaches a height of 1 to 2 feet and features small leaves at the nodes of its stem. Delicate, white, odorless flowers lacking nectar are situated at the base of the leaf vein. In Tamil, it is commonly referred to as  $p\bar{u}l\bar{a}pp\bar{u}$ . Additional names include  $t\bar{e}nk\bar{a}ypp\bar{u}k$   $k\bar{t}rai$ ,  $ci\underline{r}up\bar{t}lai$ ,  $ponkapp\bar{u}$ ,  $ci\underline{r}ukanp\bar{t}lai$ ,  $p\bar{t}laic\bar{a}ri$ ,  $karp\bar{e}ti$ ,  $p\bar{a}s\bar{a}nap\bar{e}ti$ , and  $sanp\bar{t}lai$ .

In the Madurai district of Tamil Nadu, this botanical marvel is known by the names of *poňkappū*, kūrappū, and *cirukaṇ pīḷappū*, each representing a unique facet of local culture and tradition. Through a metonymic twist, the flower embodies the essence of its parent plant.

 $ponkapp\bar{u}$ , upon closer scrutiny, reveals its composition as  $ponkal + p\bar{u}$ , merging the revered harvesting festival of Tamil culture, ponkal, with  $p\bar{u}$ , signifying flower. The literal interpretation renders it as 'the flower of Pongal,' symbolizing the commencement of the festival and adorning cattle and their surroundings with festive grandeur.

 $k\bar{u}rapp\bar{u}$ , dissected as  $k\bar{u}ra + p\bar{u}$ , intricately weaves together the concept of the thatched roof  $(k\bar{u}ra)$  and the delicate bloom  $(p\bar{u})$ . It embodies the notion of 'the flower of the roof,' earned through its customary placement atop household entrances, symbolizing auspicious beginnings.

 $ciRu\ kan\ p\bar{\imath}lai\ p\bar{u}$ , a linguistic masterpiece born of imagination and observation, comprises  $ciRu\ + kan\ + p\bar{\imath}lai\ + p\bar{u}$ , eloquently marrying the notions of smallness, eyes, the white mass within them, and the ethereal bloom. This intricate comparison between the plant's leaves and human

eyes, coupled with the resemblance of the flowers to the white mass, bestows upon it the evocative epithet of  $ciRu\ kan\ p\bar{\imath}lai\ p\bar{u}$ , a testament to the poetic brilliance inherent in local vernacular.

karpēti: This name derives from its notable ability to dissolve kidney stones, as noted on wikiwand.com. Breaking down the components, kal meaning "stone" and pēti suggesting "dysentery," the term implies that preparations made with this plant have the potential to dissolve and flush out kidney stones effectively.

## 1.3. tumpai ceți (Leucas Aspera)

The plant *tumpai*, scientifically known as Leucas aspera and belonging to the family Acanthaceae, plays a significant role in Tamil Nadu's botanical tapestry. Commonly referred to as *tumpai* or *tumba* in India, this shrub thrives in meadows and open fields, boasting three to four branches. Its elongated leaves showcase intricate camphor-like veins, while small bud-like structures transform into exquisite white flowers, adding to its allure. Throughout Tamil history, warriors proudly adorned garlands crafted from these flowers, symbolizing their valor during times of conflict (Tamil Lexicon). Even today, the flower's color and delicate texture retain cultural significance in contemporary Tamil Nadu.

In rural landscapes, children delight in the whimsical pursuit of chasing butterflies as they flutter among the *tumpai* flowers, eagerly gathering nectar. From the innocent perspective of children, the *tumpai* plant becomes inseparable from the presence of butterflies, sparking the inspiration for a new name: *pāppāti pū ceţi*. This fresh appellation underscores the close bond between butterflies and *tumpai* flowers, highlighting the picturesque scene of butterflies delicately perched atop the plants, savoring the sweet nectar. For children, the enchanting sight of butterflies gracefully gracing the *tumpai* flowers symbolizes the harmonious relationship between nature and everyday joys.

## 1.4. āṭātōṭai (Justicia Adhatoda)

The plant, Justicia adhatoda, commonly known as Malabar nut in English and *āṭātōṭai* in Tamil, belongs to the plant family Acanthaceae. The Tamil lexicon has referred to 22 names for this plant. Its leaves, bark, and roots, when crushed, emit a strong odor. Its leaves, flowers, and stems grow abundantly, often with long leaves resembling those of the mango tree. It has a bitter

taste. The name  $\bar{a}t\bar{a}t\bar{o}tai$  may have originated from the initial term -  $\bar{a}tu$   $tot\bar{a}$ , signifying 'it won't be touched,' due to the belief that its leaves are not consumed by goats (Vikram Kumar: 2018). It is said to be transformed into  $\bar{a}t\bar{a}t\bar{o}tai$ . It is used to form live fences around gardens. In naming this plant, an external factor 'goat' is used, a notable point to consider while naming in Tamil culture, which often incorporates outside factors of a plant.

In the Madurai Tamil dialect, this plant is referred to as **āṭātoṭai** (instead of long ō, it is short o). One linguistic observation is that **toṭu** means 'touch.' In the name, **āṭātoṭai**, **toṭu**. serves as the base form. and stands for eating. This usage exemplifies hyperbole in linguistic terminology, a common phenomenon in Tamil. For instance, when asked if one eats fish, to answer negatively, an individual might respond, "I won't even touch fish." This illustrates how language in Tamil culture often employs exaggeration for emphasis or to convey a strong sentiment.

## 1.5. tottār curunki (Mimosa Pudica)

The sensitive plant, scientifically known as Mimosa pudica and belonging to the pea family (Fabaceae), exhibits a unique behavior in response to touch and various stimuli by swiftly closing its leaves and drooping. This spiny subshrub features compound leaves. The plant's remarkable responsiveness to touch is attributed to the rapid release of water from specialized cells located at the bases of its leaflets and leaf stalks (Britannia: 2024). This rapid reaction to touch has inspired the creation of transparent names for this fascinating plant in Tamil.

In the Tamil lexicon, several terms have been listed to describe the sensitive plant or touch-me-not plant. These include *āļvaṇaṅki*, *kācirōrttam*, *camaṅkai*, *tīrkkamūlam*, *toṭṭārcuruṅki*, *toṭṭārciṇuṅki*, *namakkāri*, and *curukki*. Among these, *toṭṭārcuruṅki* and *toṭṭārciṇuṅki* are the only spoken forms bearing the label "Loc."

### 2.0 The Grammar of These Names is as Follows

In these names, the first part  $tottar(\sim tottal)$  remains the same, and it means 'if (someone) touches the plant.'

**2.1. toṭṭārcuruṅki**: The second part of the name - *curuṅki* describes the action of shrinking, metaphorically representing the reaction of the plant's leaves as if they were shrinking in response to touch.

2.2. toṭṭārciṇuṅki: The second part - ciṇuṅki means "something which whines," suggesting a

gentle cry or whimper. This part of the name extends the action of the plant's leaves gently closing

to the soft cry of babies, creating an association between the plant's behavior and the sound of a

baby's cry.

2.3 toṭṭāl vāṭi: The second part of the name vāṭi can be derived from vāṭu, meaning 'withering.'

Here, the action of the plant withering is matched with another condition of the plant, without a

change in domain. This structure highlights the plant's response to touch leading to its withering.

2.4 āļvaņanki: This name is highly imaginative. It represents an assumption of a natural

occurrence favoring one's own perspective. While the folding of the leaves serves to protect the

plant from herbivorous animals, an individual might interpret it as the plant greeting them.

3.0. Factors Contributing to Plant Naming

The naming of plants in Tamil culture is a multifaceted process influenced by various

factors, including the plant's physical attributes, its behavioral characteristics, its traditional uses,

and its cultural significance. These factors converge to create names that are not only descriptive

but also deeply rooted in the cultural and linguistic landscape of Tamil Nadu.

**3.1. Physical Attributes:** One of the primary factors contributing to plant naming is its physical

appearance. Plants are often named based on their visual characteristics, such as color, shape, size,

and texture. For example, the name *vēlipparutti* for Pergularia daemia highlights its tendency to

climb fences, while pīlai for Aerva lanata draws attention to its distinctive white flowers and small

leaves.

**3.2. Behavioral Characteristics:** The behavior of plants also plays a significant role in their

naming. Plants that exhibit unique behaviors, such as rapid leaf movement in response to touch,

like the Mimosa pudica, inspire names that reflect these behaviors. For instance, the various names

for Mimosa pudica in Tamil, such as *toṭṭāṛcuruṅki* highlight its remarkable responsiveness to

touch.

**3.3. Traditional Uses:** The traditional uses of plants in herbal medicine and cultural practices

often influence their names. Plants that have been used for centuries to treat ailments or have

cultural significance are often named based on these uses. For example, the name *karpēti* for Aerva

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lanata references its renowned ability to dissolve kidney stones, underscoring its potential medicinal properties.

**3.4. Cultural Significance:** Cultural beliefs, rituals, and traditions also play a role in plant naming. Plants that hold cultural significance, such as those used in religious ceremonies or festivals, may be named to reflect their importance in local customs. For example, the name *pońkappū* for Aerva lanata evokes imagery of the Pongal festival, symbolizing auspicious beginnings.

# **4.0.** Transparency in Tamil Plant Names

The transparency of plant names in Tamil is a remarkable feature that facilitates communication and understanding among speakers. These names often provide vivid descriptions of the plants, allowing individuals to easily identify and recognize them in their natural environment. For example, the name ciRu kan  $p\bar{\imath}lai$   $p\bar{u}$  for Aerva lanata vividly describes the plant's small leaves resembling human eyes and its delicate white flowers, creating a poetic and evocative image.

Furthermore, the use of metaphorical extensions and linguistic creativity in plant naming adds depth and richness to the Tamil language. By drawing parallels between plant characteristics and human experiences, these names not only convey information about the plants but also reflect the cultural values and beliefs of the Tamil-speaking community.

The naming of plants in Tamil culture is a dynamic and intricate process influenced by a myriad of factors. The transparency and linguistic creativity inherent in Tamil plant names serve as a testament to the deep connection between language, nature, and culture in the Tamil landscape.

### 5.0 Conclusion

The diverse array of plant names in Tamil reflects a rich tapestry of cultural, linguistic, and environmental influences. From the descriptive and functional naming of plants like *vēlipparutti* and *āṭātōṭai* to the imaginative and metaphorical naming seen in *pīṭai* and the touch-me-not plant, each name captures a unique aspect of the plant's characteristics, usage, or cultural significance. The transparent nature of many of these names allows for an intuitive understanding of the plants they represent, showcasing the intricate relationship between language and the natural world.

Through the exploration of these plant names, we gain insights into Tamil culture, language dynamics, and the human propensity for creativity and interpretation in naming the world around us. As we continue to study and appreciate the richness of botanical nomenclature, we further connect with our environment and the diverse ways in which humans interact with and perceive the natural world.

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