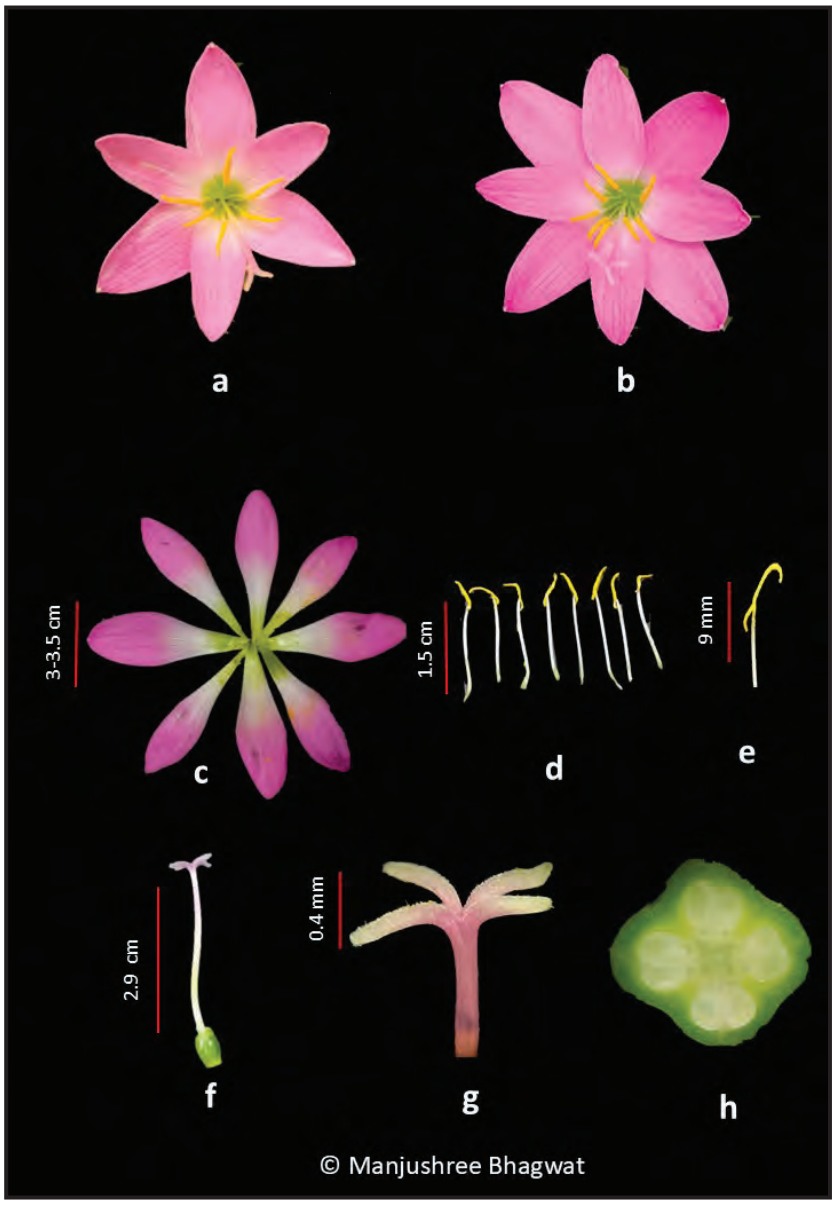
Occurrence of tetramerous flower in the non-native *Zephyranthes carinata* in Maharashtra

Floral morphology plays a crucial role in plant classification and identification. The morphological characters such as habit, underground parts, stem, and leaves prove to be useful to mark out particular plant or family of a plant. One such character that is reliable for classifying plants are the floral characters. The floral characters are relatively stable and consistent within plant families; making them useful for grouping and identifying different species and families.



Flower of *Zephyranthes carinata* Herb.: a—Trimerous condition | b—Tetramerous condition | c—Tepals | d—Stamens | e—Anther | f—Carpel | g—Tetra lobed stigma | h—Tetralocular ovary. © Manjushree Bhagwat.

On the basis of presence of number of cotyledons in the seeds; plants are grouped into dicotyledons and monocotyledons. Another striking feature of the monocotyledonous plants is the trimerous arrangement of the flowers, i.e., the petals, sepals and other floral structures are arranged in groups of three or six (two whorls of three). Thus, this character can be used to identify the monocotyledonous plants.

Zephyranthes Herb. is a genus of temperate and tropical bulbous plants, native to tropical and sub-tropical America and widely cultivated as ornamentals. *Zephyranthes carinata* Herb. is a taxon belonging to the family Amaryllidaceae. The native range of this taxon is Mexico to Colombia. It is a bulbous geophyte and grows

primarily in the seasonally dry tropical biome (POWO 2025). It bears linear, hollow, strap-shaped or grass-like leaves.

During the routine floristic survey of the campus of Radhabai Kale Mahila Mahavidyalaya, Ahilyanagar, Maharashtra for documenting the flowering plant diversity author has spotted a tetramerous flower in *Zephyranthes carinata*. The flower had eight tepals arranged in two whorls. The stamens were eight in number, arranged in two whorls, and tetracarpellary ovary with 4-lobed stigma.

Such anomalies were reported in other genera of the Amaryllidaceae as well. Formation of eight tepals were reported in *Narcissus tazetta* ssp. *aequilimbus* (Herb.) by Mifsud & Lanfranco (2024), and in *Beauverdia hirtella* ssp. *lorentzii* (Herter) by Sassone et al. (2014).

Zephyranthes carinata Herb. Bot. Mag. 52: t. 2594 (1825)
Flower solitary, with pink tepals. Flowers slightly inclined on 18 cm long peduncle. The deep lilac to purplish spathe is 3 cm long. Tepals 8, 3–3.5 cm long, arranged in two whorls. Stamens 8, arranged in two whorls. Filaments 1.5 cm long, anthers 9 mm long. Ovary tetracarpellary, syncarpous, inferior. Style filamentous, 2.9 cm, stigma tetra lobed, each lobe 0.4 mm.

References

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