# Morphobiological Properties of *Iris Pseudacorus* L. In Termiz City

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Annotation: This article analyzes the research and literature of many botanicals, floristic and systematic scientists on the bioecological features, systematics, geographical distribution, growth and development of *iris pseudacorus* L.

Keywords: Iris Pseudacorus L, Vegetation, Generative Period, Flowering Biology.

## **Intoduction:**

Medicinal plants have been known to mankind since so long. In particular, one of our compatriots, Abu Ali ibn Sina's "Laws of medicine" for centuries served as a guide not only for Arabs, but also for European physicians.

At present, the World Health Organization emphasizes the importance of the recommendations and activities of folk medicine today traditional medicine has official status in more than 120 countries around the world. In a number of countries there are academies of folk medicine, research institutes, and departments for training scientific and practical specialists for the treatment system in medical medicine.

*Iris pseudacorus*, the yellow flag, yellow iris, or water flag is a species of flowering plant in the family Iridaceae. It is native to Europe, western Asia and northwest Africa. Its specific epithet *pseudacorus* means "false acorus", referring to the similarity of its leaves to those of *Acorus calamus* (sweet flag), as they have a prominently veined mid-rib and sword-like shape. However, the two plants are not closely related

This herbaceous flowering perennial plant grows to 100–150 sm (39–59 in), or a rare 2 m (6 ft 7 in) tall, with erect leaves up to 90 sm (35 in) long and 3 cm (1.2 in) broad. The flowers are bright yellow, 7–10 sm (2.8–3.9 in) across, with the typical iris form. The fruit is a dry capsule 4–7 sm (1.6–2.8 in) long, containing numerous pale brown seeds.

*Iris pseudacorus* grows best in very wet conditions, and is common in wetlands, where it tolerates submersion, low pH, and anoxic soils. The plant spreads quickly, by both rhizome and water-dispersed seed. It fills a similar niche to that of *Typha* and often grows with it, though usually in shallower water. While it is primarily an aquatic or marginal plant, the rhizomes can survive prolonged dry conditions.

Large *Iris pseudacorus* stands in western Scotland form a very important feeding and breeding habitat for the endangered corncrake.

Flowering biology of Iris pseudacorus L: The flowers are bisexual, actinomorphic, consisting of 6 lobes, the outer 3 lobes are turned downwards, and the inner 3 lobes are facing upwards. The lower part of each flower is called the petals, and the widened part is called the leaf. Pieces of lobes grow from the bottom. It consists of 3 chins. The strings were partially flattened and grew into a roaring pipe and joined to its walls. The claws are straight, the upper part is yellow, and the back is dark black, combined with a two-chambered, dusty bread base. The nectar-producing part is located in the inner cavity of the nectar-bearing tube. The internal parts of the *iris pseudacorus* are reduced. On the outer, marginal surface of the leaves of the lobes, that is in the center of it, there are brown, radiant spots. The length of the knot is  $23.2 \pm 0.6$  mm in water,  $20.2 \pm 0.7$  mm in wet soil, 3.8 + 0.1 mm in water and  $3.6 \pm 0.09$  mm in wet soil. The length of the dust grains was  $80.5 \pm 2.3$  microns, the width was  $67.3 \pm 2.0$  microns, and the fertility was 92.9%.

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Dynamics of seasonal flowering: According to the literature, in natural conditions, the seasonal flowering of Iris pseudacorus occurs in June-July, and in the conditions of introduction - in late April.

In the Tashkent Botanical Garden, flowering has begun earlier (in April-May) than in the natural environment. Aquatic Iris pseudacorus began flowering in early May 2003-2005, flowering lasted 21-28 days and bloomed 120-171 times. In moist soil, plant began to bloom in late April and early May and lasted for 18-20 days, with 93-117 flowers. Aquatic plants differ from plants in moist soils by the fact that they start flowering 4-5 days later and the flowering process lasts 9-10 days longer and the number of flowers opens is higher.

Rhythm of daily flowering: G.K. Alimova and others. (1979) reported that under natural conditions (Leningrad - now St. Petersburg) a single flower of Iris pseudacorus blooms for 3 days. On the day of flowering, the wilting of the flowers is observed, at which time the sacs are filled with sacs. Fertilization takes the form of progamy, and on the 5th day a fertilized cell (zygote) is formed.

In Termez, Iris pseudacorus flowers in water for 2-3 days, and in moist soil for 1-2 days. In both experiments, flowering at the beginning of flowering was usually in the early morning and in the afternoon (4-5 hours in both water and wet soil), while flowering in the general flowering period was in the early morning and late afternoon (at 10 o'clock in the morning). 12, 8-10 in wet soil). At this time, the temperature was 26-29°, relative humidity 50-57%, and the degree of illumination was 75-85000 lux. The final flowering of the plant was observed at -1200 and 1600 hours. The total flowering of aquatic plants lasted 9-10 days, and in moist soil - 5-6 days.

Seasonal developmental phenology: The results of our research showed that the growth and development characteristics of Iris pseudacorus are different in water and wet soil conditions. In particular, plants in wet soils start growing and flowering 4-5 days earlier than in water, and flowering plants in water. Phase (21–28 days), lasting longer in moist soil (18–20 days). The growth and development characteristics of Iris pseudacorus are more sensitive to weather conditions, and there is a delay in plant vegetation during the winter-spring season, when there is a lot of rainfall. The duration of vegetation was 233-242 days in water and 218-227 days in wet soil. However, in both conditions, the plant was found to be able to fully pass all the seasons of seasonal development.

## Conclusion

- 1. Iris pseudacorus has fully passed the stages and stages of ontogeny in Termez. The transition of the plant to the generative period was observed in 2-3 years of vegetation, and the transition to the senile period was observed in 9-10 years.
- 2. Growth and development characteristics of Iris pseudacorus in water and wet soil are different. It was found that plants in wet soils start growing and flowering earlier than in water, and that the flowering phase of plants in water lasts longer than in wet soils.
- 3. It was found that in Termez conditions flowering begins earlier (in April-May) than in natural conditions. The seasonal flowering period of the plant was 21-28 days in water and 18-20 days in moist soil. The general flowering took place in the morning and at noon. During the day, 10-12 flowers were observed in water and 8-10 in wet soil.

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