

Oenothera biennis

[Synonyms : *Chrysantha biennis*, *Oenothera angustifolia*, *Oenothera biennis* subsp. *caeciarum*, *Oenothera biennis* subsp. *centralis*, *Oenothera biennis muricata*, *Oenothera biennis* var. *pycnocarpa*, *Oenothera garroidea*, *Oenothera glabra*, *Oenothera muricata*, *Oenothera odorata*, *Oenothera parviflora*, *Oenothera vulgaris*, *Onagra biennis*, *Onagra strigosa*]

COMMON EVENING-PRIMROSE is a biennial (occasionally annual or perennial). Native to North America (particularly east of the Rocky Mountains to the Atlantic) it has small very fragrant lemon-scented, bright yellow flowers with prominent stamens.

It is also known as Bastard evening-primrose, Coffee plant, Cure all, *Enotera* (Italian), *Enotero dujara* (Esperanto), Evening primrose, Evening star, Fever plant, Field primrose, Four-o'clock, Fragrant evening primrose, *Gemeine Nachtkerze* (German), German rampion, *Gewöhnliche Nachtkerze* (German), *Gewone Nagblom* (Afrikaans), *Gewone Teunisbloem* (Dutch), Golden candlestick, *Gulltrav* (Swedish), *Iltahelokki* (Finnish), King's cureall, Large rampion, *Melyn yr Hwyr* (Welsh), Moonflower, Moths, *Nachtkerze* (German), *Nattljus* (Swedish), Night primrose, Night willowherb, *Onagre bisannuelle* (French), Primrose, Primrose tree, *Pupalka dvojročná* (Slovak), *Pupalka dvouletá* (Czech), *Pupalka obecná* (Czech), *Rapontika* (German), Scabious, Scabish, Scavey, *Schinkenwurz* (German), Scurvish, Speckled John, Sun drop, *Teunisbloem* (Dutch), *Toårig Natlys* (Danish), Tree primrose, *Vanligt nattljus* (Swedish), Wild four o'clock, Yellow evening primrose, and *Zweijährige Nachtkerze* (German); and in flower language is said to be a symbol of early youth, inconstancy, and silent love.

The flowers open at dusk and close by noon when they turn pinkish as they wilt. Petals on the blooming flowers emit a phosphorescent light at night.

The flowers are visited by moths (especially hawkmoths) and birds enjoy the seeds.

Warning – the roots should be eaten in small quantities only and are understood to be unsuitable for domestic use. A direct effect on the liver is suspected but as yet has not been proved. It is possible that the plant could cause headache, nausea and dermatitis. It is considered to be unsuitable for epileptic sufferers.

Biennis means 'biennial'.

The phosphorescent light emitted by the petals accounts for the name Evening star.

North American Indians including the Cherokee ate the cooked leaves and boiled roots, and records show that the Gosiute tribe ate the seeds. (In other countries too the sweet-tasting root has often been eaten in the Spring or used as garnish. (Italians once ate the root before a meal as a wine appetizer.)

Common evening primrose also offered a source of medicine for a few North American tribes including the Potawatomi. Both Cherokee and Iroquois Indians used it to treat piles. It provided a slimming aid for the Cherokee too, some of the Chippewa tribe applied it to bruises, and the Iroquois also used it as a stimulant and in addition put it on boils.

Believed to have been introduced to the European mainland from North America in 1619 through the Italian Padua Botanic Garden it is cultivated today as an ornamental in many European countries and recognized by some as one of the beautiful night plants.

Common evening primrose was dedicated by the Roman Catholic Church to St. Elizabeth of Portugal (1271-1336) who was a much-respected Queen of that Country where she is known as Isabel.

The flower is celebrated in one of the poems of the English poet, John Clare (1793-1864), who wrote

When the sun sinks in the west,
And dew-drops pearl the evening's breast;
Almost as pale as moonbeams are,
Or its companionable star,
The Evening Primrose opes anew
The delicate blossoms to the dew;
And hermit-like, shunning the light,
Wastes its fair bloom upon the night;

.....

When it first arrived in England (some authorities say as early as 1614 before any seeds had reached Padua) common evening-primrose was cultivated for its edible roots which were eaten boiled, and were not only considered to be nutritious but also of possible medicinal value. In Germany, as well as eating the cooked roots, they enjoyed the young shoots as a salad vegetable.

Common evening primrose is said to have been introduced to China at the turn of the 19th and 20th Centuries. In the north-east the roots and leaves were quickly recognised locally as a vegetable, crushed seeds were added to flour and baked into cakes and seed oil was used in salads. The seeds have also provided bird feed (that included poultry). In the 1970s China developed an export market for the seeds and by the mid-1980s the plant began to be cultivated for them as a viable crop. It seems that at the beginning of the 21st Century China is now the main seed producer (for trade as seed or oil) for both her own use and for export to the rest of the world.

Today the flowering tops of this plant are used by the cosmetics industry.

Medicinally, although Western herbalists used to recommend the bark (from the flower stems) and the leaves for treating gastro-intestinal disorders, asthma and whooping-cough, it was little used even in folk medicine. From the early 20th Century following its introduction there, local Chinese medicine also recommended a root decoction for treating coughs and colds.

However since a clinical study in 1981 at St. Thomas Hospital, London which has been followed by others elsewhere, common evening-primrose has been (and continues to be) the subject of extensive research for use in orthodox Western medicine. The results of study so far have already received widespread media attention. This is one of about 80 different closely related species and the interest shown has caused the cultivation of common evening-primrose as a small-scale crop – and might even herald future fields of cultivated flowers. The plant's seeds have been identified as one of the few sources of a powerful drug called gamma-linoleic acid (that has also been found in the oil extracted from the seeds of both black currant, *Ribes nigrum*, and borage, *Borago officinalis*). The anticoagulant properties that help to reduce the rate at which blood clots (an important factor in some forms of heart attack) had already been recognized. Research during the 1980s now indicated that common evening-primrose could also be used in the treatment of many degenerative diseases eg. multiple sclerosis, in alleviating premenstrual tension, high blood pressure, asthma, in easing some forms of eczema, in calming hyperactive children, in the treatment of both Parkinson's disease, and alcoholic poisoning (especially withdrawal symptoms) and as a prevention of hangovers, in treating rheumatoid arthritis, and many other to the layman completely unrelated disorders.

Chinese medical research (independent of Western activities) has also turned attention on the plant in the last couple of decades of the 20th Century and findings have included much of the foregoing.