

236. *NARCISSUS TAZETTA* L. (AMARYLLIDACEAE) — Daffodil, Chinese Sacred Lily, Polyanthus Narcissus

Bulbous ornamental, grown in water and gravel, can be forced for Christmas. We received just such a narcissus, bulbs on top of gravel, for Christmas, 1982. Of the eight bulbs, flowers extended from January to March, aromatically in the kitchen window. The essential oil is used in high-grade French perfumes. Twig extracts are viristatic,³³ probably due to narciclasine.

Flowers thought to benefit the hair; used in female fevers in China.¹⁶ Bulbs absorbent, diuretic, emetic, purgative.¹ Chinese chop and apply the bulbs externally as antiphlogistic and analgesic to abscesses, boils, itch, mastitis, bulbs poulticed to sores, swellings, ulcers, shaped into demulcent bolus "to carry bones out of the oesophagus."^{16,33} Juice of bulb used for eye ailments. A female anticancer remedy,⁴¹ considered abortifacient.³³

Reported to contain lycorine (C₁₆H₁₇O₄N), narcitine, pseudolycorine, suisemine (C₁₇H₁₉O₅N), tazettine (C₁₈H₂₁O₅N);^{1,16} also, galanthamine, narzettine, nartazine, haemantamine, homolycorine, fiancine, hippeastrine, pluviine, galanthine, panceratine, narcissidine. Flowers contain narcissin (isorhamnetin-3-rutinoside, C₂₈H₃₂O₁₆), isorhamnetin, tazettine. Leaves contain 0.23% alkaloids. Flowers of var. *chinensis* (Chinese sacred lily) contain rutin, isorhamnetin, and carotenoid pigments. The essential oil contains 25% linalool, 24.8% benzylacetate, 8% benzyl alcohol, 4.3% alpha-terpineol, 3.9% cineol, 3.3% alpha-phenylpropylalcohol, 1.7% phenylpropylacetate, 1.5% indol, 0.4% phenylethylacetate, 0.3% heptylalcohol, 0.1% benzol(?), 0.08% phenylethylalcohol, 0.02% nonanal, traces of undecalactone.³³ The essential oil of the typical variety contains eugenol, benzyl alcohol, cinnamyl alcohol, benzaldehyde, and free and esterified benzoic acid. Bulbs contain 65.85 mg narciclasine per kilogram.²⁰⁹

Toxicity — POISON, in animals, induces gastralgia, gastroenteritis, accelerated pulse, and pyrexia; larger doses produce convulsions, paralysis, and death.⁴¹ Lycorine is cytotoxic in the KB tumor system.¹⁰ The volatile oil has such a strong odor as to cause headache. Bulbs of various narcissus species will cause nausea, vomiting, diarrhea, trembling, convulsions, and may be fatal.³⁴