

Ritual Use

In former times, the Tarahumara Indians of northern Mexico drank the cactus juice during secret ceremonies in the western canyons (Bruhn and Lindgren 1976, 175; Pennington 1963, 166f.). Apart from this, the cactus is used as a peyote substitute (see *Lophophora williamsii*).

Artifacts

A pre-Hispanic clay vessel from Colima has the shape of four stalks of a column cactus as a decorative element. It may be a representation of this cactus.

Medicinal Use

The cactus is used in Mexican folk medicine to treat stomach ulcers and cancer (Bruhn and Lindgren 1976, 175). Heated, the fresh cactus flesh of *Pachycereus pringlei* is applied externally to treat rheumatism (Felger and Moser 1974, 421*).

Constituents

The cactus flesh contains the β -phenethylamines carnegine (= pectenine), 3-hydroxy-4-methoxyphenethylamine, salsolidine, 3,4-dimethoxyphenethylamine, heliamine, 3-methoxytyramine, and arizonine (Bye 1979b, 35*; Bruhn and Lindgren 1976; Mata and McLaughlin 1982, 109*).

Effects

Freshly pressed cactus juice, mixed with water, is said to produce effects similar to those of peyote (see *Lophophora williamsii*), including dizziness and visions (Bruhn and Lindgren 1976, 175; Pennington 1963, 167). The fermented juice also has strong purgative effects (Bye 1979b, 34*).

Commercial Forms and Regulations

None

Literature

See also the entry for *Lophophora williamsii*.

Bruhn, Jan G., and Jan-Erik Lindgren. 1976.

Cactaceae alkaloids. XXIII: Alkaloids of *Pachycereus pecten-aboriginum* and *Cereus jamacaru*. *Lloydia* 39 (7-8):175-77.

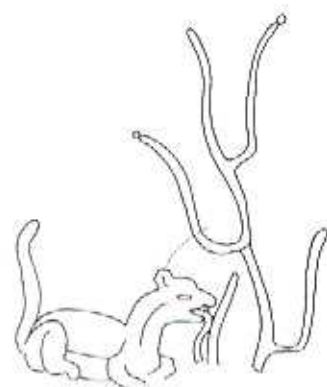
Mata, Rachel, and Jerry T. McLaughlin. 1980.

Tetrahydroisoquinoline alkaloids of the Mexican columnar cactus *Pachycereus weberi*. *Phytochemistry* 19:673-78.

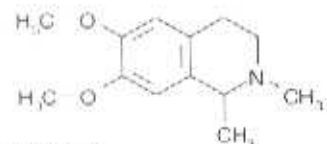
Pennington, C. W. 1963. *The Tarahumara of Mexico: Their environment and material culture*. Salt Lake City: University of Utah Press.

Strombom, L., and J. G. Bruhn. 1978. Alkaloids of

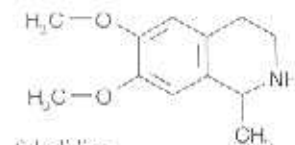
Pachycereus pectenaboriginum, a Mexican cactus of ethnopharmacologic interest. *Acta Pharm. Suecica* 15:127.



This ancient Mexican petroglyph (Olmec horizon) shows a wild cat as it licks a cactuslike plant. This may be a reference to the psychoactive powers of a columnar cactus of the genus *Pachycereus*. The cat may be a shaman who has transformed himself with the aid of the cactus juice.



Carnegine



Salsolidine

Papaver somniferum Linnaeus

Opium Poppy

Family

Papaveraceae (Poppy Family)

Forms and Subspecies

Over the course of time, numerous sorts, forms, varieties, and subspecies have been described for this highly variable plant. The most important are:

Papaver somniferum var. *album* DC. (white blooms)

Papaver somniferum var. *apodocarpum* Huss. (acaulescent seed capsule)

Papaver somniferum var. *glabrum* (produces an especially high-quality opium; Macmillan 1991, 417*)

Papaver somniferum var. *hortense* Huss. (flat stigmal disk)

Papaver somniferum var. *nigrum* DC.

Papaver somniferum ssp. *setigerum* (DC.) Corbiere (this may be the wild form; cf. Grey-Wilson 1995, 172*; Macmillan 1991, 417*; Zander 1994, 417)

Papaver somniferum ssp. *somniferum*

An unusual form, called hens and chicks, has the capsule surrounded by small secondary capsules (Grey-Wilson 1995, 173*). In addition, a number of cultivars have been produced as ornamentals, e.g., 'Black Peony', 'Golden Peony', 'Pink Chiffon', 'White Cloud', et cetera (Grey-Wilson 1995, 172*).

Papaver somniferum var. *glaucum* (Boiss. et Hausskn.) O. Kuntze is now regarded as a separate species: *Papaver glaucum* Boiss. et Hausskn. (the so-called tulip poppy) (Zander 1994, 416*).

Synonyms

Papaver glaucum Boiss. et Hausskn.

Papaver nigrum DC.

Papaver officinale Grmel.

Papaver setigerum DC.

Folk Names

Adormidera, aguna (Lithuanian), amapola, amapola de opio, biligagase (Kannada), black poppy, bloed-zuipers-bloem (Flanders), calocatanos (Gallic), feldmohn, garden poppy, gartenmohn,

verum), powdered cloves (*Syzygium aromaticum*), and Spanish wine that was to have a far-reaching impact. Until the nineteenth century, laudanum was one of the most effective of all universal remedies and was also drunk for its inebriating effects.

In the seventeenth century, opium was one of the most important trade articles of the Dutch East India Company (Meister 1677, 93*). The Württemberg pharmacopoeia of 1741 characterized opium (= *meconium thebaicum*) as a "divine medicine" (Schneider 1974, 3:21*). Goethe described it as the "quintessence of the sweet slumber juices" (*Faust 1*). Morphine, isolated from opium by the German pharmacist Sertürner (1805), was the first pure active plant substance ever to be extracted and made available; the event revolutionized the pharmaceutical industry.

Opium became famous through the works of many nineteenth-century authors. Thomas de Quincey (1785–1859) saw in opium a *mana*, an *ambrosia*, a *panacea*, a universal remedy, a "mysterious balm to fulfill all human wishes" (De Quincey 1985, 183).

The Opium War of 1840–1842, which the English initiated purely from economic motives, led to far-reaching changes in world politics and the shape of international trade (Behr 1980; cf. Geddes 1976, 202f.; Solomon 1978). In the 1920s, the use of opium took on social forms that appeared threatening to the ruling class and ultimately led to global prohibition (Johnson 1981; Kohn 1992*). Today, opium is important primarily as the starting point for the illegal production of heroin.

Distribution

This cultivar has spread into all regions of the world. Large areas of cultivation—either for the pharmaceutical industry or for illegal heroin production—are found in the Golden Triangle, northern Thailand, central Asia, Turkey, Mexico, Tasmania, and Austria.

In Switzerland, the opium poppy now occurs as a wild or feral plant (Lauber and Wagner 1996, 144*).

Cultivation

The plant is easily propagated from seeds, which should be broadcast in spring. Some of the seeds will germinate after ten to fifteen days. The seedlings do not like to be transplanted. Once poppies have appeared in the garden, it is relatively certain that they will always reappear, for the plant sows itself quite readily. It also can become wild and begin to appear in neighboring gardens. When harvesting the capsules, care should be taken to leave the heads of some of the plants untouched so that they can ripen and produce seeds for the following year. Poppies will also spread if the dried plants are composted, as the seeds will be distributed with the compost.

Poppies thrive best in warmer soils that are rich in nutrients, contain a great deal of humus, and are well tilled. The plant requires a great deal of lime and consequently prefers lime-rich soils (Heeger and Poethke 1947, 236). For more on commercial methods of cultivation, see Griffith (1993).

Appearance

This annual plant possesses a distinct taproot, from which the perpendicular, simple or only slightly branching stem (as tall as 175 cm) develops. The gray blue or, more rarely, greenish leaves are ovate-oblong with a more or less serrated margin or irregular lobes. The long flower stalk, which can be either hairless or only slightly pileous, bears a single flower with four petals that can vary in color (white, pink, violet, bluish, purple, light red, luminous red, dark red, almost black). The pistil itself already bears a resemblance to the fruit capsule. The smooth, round, capsule-shaped fruit has a corona and ranges in size from 2 to 6 cm, depending upon the location, sort, variety, and subspecies. It can be rather slender in appearance or very obese-gibbous. One capsule may contain up to two thousand of the tiny, kidney shaped seeds. The seeds can be creamy yellow, brown, blue-green, or black in color. In central Europe, the plant flowers in June and July. The fruits are mature by August at the latest. A white, milky sap (latex) flows throughout the plant.

The opium poppy is easily confused with the



Just as the flowers of *Papaver somniferum* can vary in color and size, the seeds also appear in a variety of colors. (Photograph, Karl-Christian Lyucker)



Left: The opium poppy (*Papaver somniferum*) is a popular ornamental.

Right: A dark violet-blooming variety of the opium poppy (*Papaver somniferum* var. *nigrum*).



This early illustration of the white-blooming variety of the opium poppy is botanically accurate. (Woodcut from Gerard, *The Herball or Generall History of Plants*, 1633).

guia guina (Zapotec), kasa-kasa (Tamil), kashakhasa (Malayam), kavl-a-kúknár (Persian), kish-kásh (Arabic/Yemen), koknár (Persian), koquenat, madi-huada (Mapuche, "lovely gourd"), magan, magen, mägen, mägenkraut, magesamo, maggona (Estonian), maggoms (Latvian), mago, magsat, magsomkraut, málian, mahonius (Vulgar Latin), mahunus, mak (Slavic), manus, mechones, meconium, mekon, miconium, mohn, namtilla (ancient Assyrian, "plant of life"), nocuana-bizuono-huse-achoga-becala (Zapotec), oehlmagen, oehlsaamen, opium poppy, papaver (Latin), papáver, papaver album, papavero indiano (Italian), papavero somnolente, papæg, papula, pavot des jardins, pavot somnifère, popig, popæg (Anglo Saxon), poppy, post (Hindi), póst-a-kúknár (Afghani), posto (Bengali), schlafmohn, schwarzer magsaamen, slaapbol (Dutch), white poppy, ying su ke (Chinese)

Folk Names for Opium

Affion (Arabic), affium, afin (Kannada), afion, a-tu-yung (Chinese), atyum (Arabic), shiphena, amapola (Spanish), amhon (Portuguese), amphion, amson, aphenam (Sanskrit, "foamless"), aphim (Hindi), aphu (Marathi), arfiun, chandu, maslach (Turkish), meconium, meseri, milk of poppies, misri (Egyptian), nagaphena, O. offlion, ofium, opio (Latin), opion (Greek), opium, poust, tschandu, tschibuk

History

The opium poppy is known only as a cultivar. Although it is often thought that the plant was first cultivated in Asia, its home actually lies in central and/or southern Europe (Grey-Wilson 1995, 169⁴). Poppy was being cultivated in northern Italy, Switzerland, and southern Germany as early as the Neolithic period. It probably was used both as a source of food and as an inebriating plant: "[T]he inebriating and sedative effects of the seeds and the oil obtained from them may not have escaped the lake dwellers. In any case, both the type of use and the frequency of its occurrence and the quantities of poppy seeds that have been found demonstrate that we are looking at an important cultivar of the lake dwellers" (Hoops 1973, 233; cf. Hartwich 1899). Although it has not yet been possible to determine exactly when humans began growing poppies in the southern and northern Germanic territories, the practice certainly dates to a very early time. The Germanic peoples planted poppies (Proto-Germanic *magant*) in poppy or *magan* fields that were known as *odámsack* and were regarded as convalescent sites at which Odin/Wotan would effect healing miracles.²⁷

The poppy is one of the most important medicinal plants in the history of pharmaceuticals. It contains a latex—the "juice of the

plant of forgetting" (Ovid)—known in ancient times by such names as *tears of the moon* and *tears of Aphrodite*. When the latex is exposed to air, it coagulates into a brown mass known as raw opium or simply opium. The methods for obtaining opium were discovered not in Southeast Asia—as is so often assumed—but in Stone Age central Europe, in the area of Lake Constance or in Provence (Hartwich 1899; Seefelder 1996, 11).

The earliest mention of the poppy, however, is on a Sumerian tablet (ca. 3000 B.C.E.), where it is described as the "plant of happiness." The first literary mention is in Homer's *Iliad* (cf. nepenthes). Our word *opium* is derived from the Greek *opion*, "latex [of the poppy]," which in turn is derived from *opes*, "plant juice." Roman reports demonstrate that the Gauls were well aware of the opium poppy and its properties (Hofer 1990, 93⁵). Walahfrid Strabo (809-849), in his hexametric *Hortulus*, praised the psychoactive effects of the German opium poppy as "sacred to Ceres" (Schmitz 1981, 380; Stoffler 1978, 91). The Vikings are known to have used opium for medicinal purposes, and probably also as an inebriant (Robinson 1994, 547⁶).

At the present time, we still do not know when the Egyptians first began to use opium. Some authors have conjectured that the poppy was already known and being used in the time of the Old Kingdom, while other authors have suggested that the Egyptians did not become acquainted with and come to appreciate the plant and its opium until the time of the New Kingdom or even late antiquity (Bisser et al. 1994; Merrillees 1962).

In China, opium has been documented as far back as the third century. The Chinese physician Hua To used narcotics of opium and *Cannabis indica* in surgical procedures (Geddes 1976, 201). The Arab scholar Avicenna (= Abu Ali al-Hosein ben Abdallah Ibn Sina, 980-1036), who is considered to be the most important physician of the Middle Ages, is known as the "father of sleep" because he introduced the use of opium into Islamic medicine (Seefelder 1996, 52ff.).

In fifteenth-century Beijing, opium was celebrated as the best of all aphrodisiacs and apparently was used in great quantities (Duke 1973, 393). In Siam (Thailand), opium was highly regarded by the kings of Ayutthaya since at least the fourteenth century. At that time, production was probably already in the hands of the mountain tribes, who still number among its most important producers (Geddes 1976, 208). During the Middle Ages, opium was listed in all European pharmacopoeias (Schneider 1974, 3:20⁷), and opium preparations were used as anesthetics (cf. *soporific sponge*).

In 1670, the English physician Thomas Sydenham invented laudanum, a tincture of opium, saffron (*Crocus sativus*), cinnamon (*Cinnamomum*

271 Hofer 1990, pp. 82f.; cf. *Dioscorides nigra*.

tulip poppy, *Papaver glaucum* Boiss. et Hausskn. [syn. *Papaver somniferum* var. *glaucum* (Boiss. et Hausskn.) O. Kuntze], which does not contain any psychoactive alkaloids. It is also occasionally confused with the Oriental poppy (see *Papaver* spp.).

Top right: In Southeast Asia, the dried leaves of the kratom tree (*Mitragyna* sp.) are smoked as an opium substitute.

Bottom right: The arils of the Californian chestnut (*Aesculus californicus*) were formerly used as an opium substitute.

Psychoactive Material

- Fruit capsules (fructus papaveris immaturi; capita papaveris immaturi, pericarpium papaveris, opium capsules, poppy heads)
- Opium (latex)
- Seeds (semen papaveris, poppy seeds)
- Leaves (folia papaveris, poppy leaves)
- Roots

Opium Substitutes

(From Emboden 1979; Emboden 1986, 165*; Low 1990, 199*; Ludwig 1982, 134f.*; Millspaugh 1974, 168*; Seefeldt 1996; supplemented.)

The following plants and products are or have been used as opium substitutes:

Name	Stock Plant	Notes
Amapola	various	
Amapola silvestre (wild opium)	<i>Bernoullia flammea</i> Oliv.	seeds
Asafoetida	<i>Euphorbia</i> spp.	latex used as medicinal incense
Black tar	<i>Papaver somniferum</i>	raw opium that has been enriched with heroin through diacetylation
California buckeye (fruit shell)	<i>Aesculus californicus</i> (Hippocastanaceae)	1/10 of the potency of true opium
California poppy	<i>Eschscholzia californica</i>	tinctures
Chicalote	<i>Argemone mexicana</i> <i>Argemone platyceras</i> Lk. et Otto	latex
Flanders/Corn poppy	<i>Papaver rhoeas</i> L. (see <i>Papaver</i> spp.) <i>Papaver somniferum</i> <i>Papaver bracteatum</i> (cf. <i>Papaver</i> spp.)	
Heroin		synthesized from morphine
Indian pipe	<i>Monotropa uniflora</i> L. (Monotropaceae)	dried herbage
Kratom	<i>Mitragyna speciosa</i>	leaves
Lactucarium (latex)	<i>Lactuca virosa</i> <i>Lactuca sativa</i> L. <i>Lactuca serriola</i> L. [syn. <i>Lactuca scariola</i> L.] <i>Lactuca quercina</i> L.	"Lactuca agrestis"
Morphine		synthesized from thebaine
Ohio buckeye	<i>Aesculus glabra</i> Willd.	hypnotic component aesculine
Pituri	<i>Duboisia hopwoodii</i>	nornicotine
Red buckeye	<i>Aesculus pavia</i> L.	hypnotic component aesculine

Preparation and Dosage

The leaves are collected during the period in which the fruit capsules are maturing, and are dried in the shade. They can be smoked alone or in smoking blends. A rather subtle opium effect will become apparent after consuming several joints. The dried leaves also can be brewed or boiled to make a tea.

The two most important products are the capsules (poppy heads) and the milky sap (latex). The plant contains the greatest amount of latex at the end of the flowering phase and while the fruit is first ripening. The latex level declines again as the capsule matures. For this reason, both the capsules and the latex are harvested shortly after the flowers have wilted. The capsules are broken off where they connect to the stalk and are used fresh or set out to dry. To dry, they should be spread out in a single layer (perhaps in the sun), as they may otherwise become moldy. The seeds continue to mature as the heads ripen and will be usable for sowing the following year (although they will not be as vital as those of a completely matured plant).



The latex, which oozes out of incisions made in the ripe capsules, dries to a brown mass known as raw opium. The highest yield can be obtained when

the capsule wall is cut with a small, special knife perpendicularly or obliquely to the longitudinal axis in the afternoon or evening hours between the 8th and the 10th day after the petals have fallen off. The white latex that emerges quickly hardens and turns brown. The sticky mass can be scraped off and collected the next day. Each capsule can yield approx. 20–50 mg of raw opium. At least 20,000 poppy capsules are required to obtain 1 kg of opium. This corresponds to a poppy field approximately 400 m² in size. (Wagner 1985, 162*)

The brown raw opium is then pressed into balls or flat cakes that will slowly dry into a hard, crumbly, solid mass. The balls or cakes should be stored in a dark, airtight location.

Opium is consumed in numerous ways: orally (opium eating, opium drinking), rectally (as a suppository or enema), smoked, or, when sterilized and dissolved in a saline solution, injected. Opium has a very bitter and characteristic taste (earthy herby) that, once tasted, will not be forgotten.

Opium usually contains about 10% morphine (although concentrations can vary considerably). A moderate psychoactive dosage consists of the amount of opium that contains about 30 mg of morphine, i.e., around 300 mg (0.3 g) of opium.

In Rome, "slumber drinks," whose main ingredient was opium, were very popular during the time of the Caesars (cf. soporific sponge). These drinks were also known as "pain-relieving catapotium." One recipe that has come down to us lists the following ingredients: *sili* (presumably *Chaerophyllum temulentum* L.^{2/2}), *Acorus calamus*, *ruta* (the seeds of either *Ruta graveolens* or *Peganum harmala*), *castoreum* (a glandular secretion of beavers), *cinnamomum* (cinnamon, probably *Cinnamomum verum*), "tears of the poppy" (opium), panax root (undeterminable), *mandragora* (mandrake root, *Mandragora officinarum*), dried "apples" (presumably mandrake fruits), *Lolium temulentum*, and peppercorns (*Piper nigrum*, cf. *Piper* spp.). The ingredients were chopped; raisin wine (cf. *Vitis vinifera*), a very sweet and heavy wine, was dripped in; and the entire concoction was then rubbed into a mass (Schmitz 1981, 380; Seefelder 1996, 36). This mixture is strongly reminiscent of the later, opium-laced soporific sponges as well as theriac.

In China, aphrodisiac "spring agents" were mixed from opium, ginseng roots (*Panax ginseng*), and musk.



Above: A normal and a mutated form of the poppy capsule (*Papaver somniferum*), known as hens and chicks.

Left: Opium is obtained by making incisions in the unripe fruit capsules of the opium poppy.

There are a number of methods for preparing an opium or poppy tea. The freshly harvested capsules can be boiled in water for fifteen to twenty minutes (until they look like well-cooked vegetables). After the liquid has cooled, strain and drink. A clearly effective dosage consists of two handfuls of capsules per person. The tea tastes like artichoke water. The pods can be boiled together with the juice of half a lemon (which will apparently have a favorable effect upon the solubility of the alkaloids). The dried capsules can be prepared in a similar manner. These, however, are best when ground (e.g., in a coffee grinder), thoroughly moistened with ample lemon juice, and then boiled in water for a short time. Allow to sit for ten to thirty minutes, then strain and drink. This preparation has a slightly unpleasant taste.

The fresh, not fully ripened capsules can be made into an opium and rum pot. A container that can be completely sealed is filled to the brim with opium capsules, after which rum is added until all the fruits are covered. To improve the bitter taste and to potentiate the effects, several female inflorescences of *Cannabis indica* or *Cannabis sativa* and flowers of *Datura metel* or another *Datura* species (*Datura* spp.) may be added. Seal the container and allow the mixture to sit in a relatively warm location for six months. Then pour off the liquid and vigorously squeeze the opium capsules in a strainer. As little as one shot glass of the liquid will induce clearly perceptible opium effects.

In ancient and late ancient times, opium was usually dissolved in wine (*Vitis vinifera*) for consumption (Krug 1993, 14*). Both the poppies and opium were also added to beer and mead. In

^{2/2} This umbelliferous plant has the same effect on grazing cattle as the bearded darnel (*Lolium temulentum*) (Boehr et al. 1994, 210**).

"In the name of Allah, the Compassionate, the Merciful. Praise be to Allah, whose might created opium and whose power allows it to heal diseases."

ABU L-QĀSIM YAZDĪ
"TRACT FOR OPIUM SMOKERS"
IN *VOM RAUCH IM ORIENT UND
OSZDEN*
(GILPEK 1995, 51*)

"The Indians [— from India/Indonesia] use this aſion or anſion [— opium], before the Jawaneſe and Malay, alſo the Malabarans, Ceylonese, as well as the Moors from the Arabic Coaſt, as well as the Perſians and Turks, uſually to increaſe their ſenſual pleaſures."

GEORGE MEIſTER
*DER ORIENTALISCH-INDIſCHEN
KUNST- UND LUSTGÄRTNER* [THE
ORIENTAL-INDIAN ART AND
PLEASURE GARDENER]
(1677, *COL.* 9, 29*)



In twentieth-century Europe, it was believed that opium was a Chinese invention as well as a typical Chinese vice. This led to the image of the Chinese opium den, which continues to etch its way into many people's minds. (Magazine illustration, Germany, ca. 1920.)

his sixteenth-century herbal, Tabernaemontanus provided a recipe for barley mead whose active ingredient was *magsamen* (= *Papaver somniferum*)! In India, a drink was made from wine, hemp seeds (*Cannabis indica*), poppy seeds, and opium (Duke 1973, 392). Opium is also an ingredient in bhang drinks (cf. *Cannabis indica*). In ancient India, opium was swallowed mixed with *araq* (alcohol).

Opium is one of the key ingredients in the Oriental joy pills. In the Orient, opium, either alone or mixed with such other substances as hashish (cf. *Cannabis indica*), spices, ambergris, musk, olibanum (cf. *Boswellia sacra*), and powdered pearls and precious stones (lapis lazuli, rubies, emeralds), was made into little balls—which were sometimes even gilded—that were swallowed or administered anally (Croutier 1989, 55). A ball 0.5 to 0.7 mm in diameter was the dosage for a rectal suppository, which was pushed as deeply into the rectum as possible. There it would quickly dissolve, so that the effects would become apparent after as little as ten to fifteen minutes. When administered in this manner, great care needed to be exercised with dosage.

The use of poppy capsules, poppy seeds, and opium as incense is very ancient. Opium and bitumen were inhaled as fumigants for treating toothaches (Schmitz 1981, 380). During the Middle Ages, a medicinal and psychoactive incense was made using opium, *Mandragora officinarum*, and arsenic (Seetelder 1996, 200).

In China, smoking opium (*chandu*) is produced by dissolving raw opium in water and bringing it to a boil. The resulting mass, which remains moist, is then allowed to ferment for several days or weeks. Fermentation is complete when an elastic, kneadable mass results. The *chandu* is now ready for use. When used alone, *chandu* is not "smoked" but, rather, heated in the bowl of a pipe and vaporized. The vapor is inhaled deeply (Hogshire 1994, 86). A dosage for an opium pipe is a ball of opium the size of a pea. For noticeable visionary effects, several pipes should be smoked at short intervals. The desired effects typically begin after the fifth pipe.

In China and Laos, opium was and is mixed with tobacco (*Nicotiana tabacum*) for smoking (Geddes 1976, 202; Westermeyer 1982, 56). In Laos, the resinous remains (a condensate of the smoke or vapor) are scratched out of frequently used opium pipes, mixed with raw opium, and sold under the name *kle dya feen*, "little opium tails" (Westermeyer 1982, 56). In Sumatra, opium is mixed with the leaves of *Ficus hypogaea* (von Reis Altschul 1975, 53*). In India, opium is smoked with hemp (*Cannabis indica*) or wild tobacco (*Nicotiana rustica*). In Morocco, dried poppy capsules are smoked to induce sleep (Vries 1984*), and sometimes chicken dung is added to

smoking opium to extend it (Bourke 1996, 161*).

Laudanum is a tincture that was originally made of opium, saffron (*Crocus sativus*), cinnamon (*Cinnamomum verum*), clove powder (*Syzygium aromaticum*), and Spanish wine (cf. *Vitis vinifera*). It was later produced using just opium, saffron, and high-proof alcohol (70% ethanol) (*opii tinctura*). The pharmaceutically standardized tincture should contain about 1% morphine. The largest single therapeutic dose of opium tincture has been listed as 1.5 g (Wagner 1985, 162*).

Ritual Use

Opium was ingested in the Minoan culture to produce the ecstatic states needed for religious ceremonies (Kritikos 1960). On Crete, seeresses would give oracles and divine the future while under the influence of opium:

Around 1300–1250 B.C.E., in the land of the goddesses of health and healing (Crete), opium was inhaled or used as an incense: this is evidenced by an ash heap and a tube-shaped vase with an opening on the side that was found during excavations . . . of the divine idols of Gazi . . . The same effects were expected from opium smoke as were later of tobacco smoke: cheerfulness, forgetfulness, or ecstasy. (Faure 1990, 123*)

Demeter, the earth goddess and mother of grain, who was adorned in wreaths of poppies, was originally venerated on Minoan Crete. From there, her cult spread to the other Greek islands and the mainland. One of her sacred plants was the poppy (cf. *kykeon*):

The inebriating plant can be demonstrated to have been everywhere in the Demeter cult, which was not limited to Eleusis, but was found throughout the entire settlement area of Magna Graecia, for example, in Enna on Sicily, upon whose sacred mountain a Demeter shrine was enthroned in which quite riotous initiation mysteries were also held. Similar rites and festivals were associated with the goddesses corresponding to Demeter, for example, Cybele in Asia Minor and later Ceres in Rome, as the influence of the Greek cults of the gods manifested themselves in the new centers of power. (Seetelder 1987, 19)

In the ancient world, the poppy was regarded as the nourishment of divining dragons, as a mysterious magical plant, and as a sleeping and dreaming agent. According to Theocritus, the poppy grew from the tears that Aphrodite shed as she mourned her youthful lover Adonis. The plant was sacred to many gods and goddesses: The Great

Mother goddess Cybele was depicted holding poppy capsules in her hand, as was Hypnos, the god of sleep, the "resolver of cares." Hermes/Mercury carried the plant in his left hand (cf. moly). Thanatos, or Death, was decorated with garlands of poppies, while Nyx, the goddess of the night, was portrayed with poppies wrapped around her temples.

In late antiquity, poppy seeds were an important ritual smoke offering to Hypnos, the god of sleep, at the Orphic mysteries (a cult of Dionysos). The poppy also symbolized the prophetic dream. Opium appears to have been used in the sacred incense of Epidauros and in preparations for inducing the healing and vision-giving temple sleep. Poppies and opium occupied a firm place in the religious healing cult of ancient times (Krug 1993⁷).

The opium poppy was also a magical and ritual plant among the Germanic tribes. It was sacred to the southern Germanic (Frankish) god Lollus. Ludwig Bechstein described an amazingly long-lived pagan custom in *Der Sagenschatz des Frankenlandes* [Treasury of Tales from Franconia] (1842):

One can still read of a purported pagan idol whose type and name belongs to Franconia quite alone. This is Lollus, Löllus, or Lullus, whose special veneration is said to have taken place on the Main River (near the later city of Schweinfurt). The bronze image of the idol, in the form of a youth with curly golden hair, was found. From around his neck, a garland of *mogamenköpfen* (poppy seed capsules) hung down over his chest. The right hand of the image is reaching for its mouth and grasping the tongue with its thumb and index finger; in the left it holds a cup of wine, in which stand ears of grain. Apart from a loincloth, the body was completely naked. The image is said to have stood in a sacred, enclosed grove by the banks of the Main, and the people are said to have brought it offerings of grapes and ears of grain at certain times. (In Hasenfratz 1992, 109f.)

The name Loll(us) suggests the German word *lallen* ("slur"). In other words, Lollus was an oracular god who, so to speak, was inebriated from opium and/or wine and slurred his words, perhaps "speaking in tongues." The name Lull(us) is suggestive of *lullaby*, "to put to sleep." After all, even in the present day one can sometimes hear of the rural custom of administering some poppy juice (raw opium) to restless or crying children to put them to sleep. Perhaps the image of Lollus represents an iconographic recipe: poppy heads (opium) are added to wine along with grain (perhaps ergot; cf. *Claviceps purpurea*). If a person partakes of this drink, then he or she will

"speak in tongues."²⁷⁵ Speaking in tongues, also known as glossalalia, is a type of unconscious flow of speech that has been known since ancient times and appears both in shamanic rituals and in religious cults (Goodman 1974).

Opium played a role in the meditations and mystical rituals of several Islamic sects and secret societies (Sufis, dervish orders). Because of the secrecy of their traditions, however, no details are known about such activities (Seefeldler 1996, 56).

Women in Oriental harems were quite fond of using opium and developed certain rituals in their dreary solitude:

The nights in the harem swelled with *key* (ultimate fulfillment) induced by opium pills and the drowsy peace of sated senses. The women indulged in drawn-out opium rituals, spending the evenings inhaling hookahs or eating opium, the "elixir of the night," dreaming of faraway lands beyond the latticed windows. Mostly, they preferred eating rather than smoking opium because the effect lasted longer, dreams lingering until the rising of the sun. Amnesia followed: night after night of this induced chronic insomnia. The women began forgetting their distant homes, their lives before the seraglio. In order to remember, they told stories to one another. A thousand stories of faraway lands, stories told in the night. At first it was a thousand nights of stories, but even numbers brought bad luck, so they added one. (Crouzier 1989, 56)

In Asia, opium was often used as an aphrodisiac in the erotic rituals of the Taoists and tantrists (cf. *Camellia sinensis*, Oriental joy pills).

In Asia, opium is still used today by fakirs, yogis, sadhus, and shamans (cf. *Aconitum ferox*, *Camabis indica*). The shamans of the Miao, a mountain tribe in northern Thailand, smoke opium before a healing ceremony in order to enter the trance that is needed to heal (Geddes 1976, 218f.). In this condition, they can travel to heaven and act on behalf of the ill person while they are there. In Thailand, opium is also used as an offering to sacred trees and rocks. According to a legend of the Akha tribe (Thailand), the first poppy plant arose from the heart of a beautiful woman who was killed because she had given herself in love to all the men (Anderson 1993, 117*).

Artifacts

A statue of Tammuz (sacred raut) standing on a plant that was found in Ur and dates to the time of the Sumerians may be one of the oldest poppy artifacts. The flowers depicted on the statue are strongly reminiscent of those of *Papaver somniferum* (Emboden 1995, 100*).

"I dropped some more laudanum into the glass. The night was a coat that provided warmth and security, I pulled it more closely around my body. Time became space, quite thick, like a small chamber that lay no longer inside the pyramid but far below it. Nothing occurred any more, only peaceful quiet, unassailable solitude."²⁷⁶

ERNST JÜNGER
ANSÄHERUNGEN [APPROACHES]
(1990, 205⁷)

Inebriated
Your sun is stronger than the
sun of Africa.
I have no parasol against it;
If it is true that I inebriate myself,
then it is more on you than on
opium.

JEAN COCTEAU
(1988, 57)



The poppy flower and the opium that is obtained from its fruit capsule have long been used as seductive names for sensuous perfumes. (Advertisement in a German magazine, ca. 1915)

²⁷⁵ A similar iconographic recipe can be found on an image of Demeter.



Top: In ancient times, the poppy was sacred to the goddess Demeter. Opium, the juice it yields, was known as the tears of Demeter. (Greek relief of Demeter with poppy capsules, Corinth, first century)

Bottom: A set of Chinese utensils for smoking opium. (San Francisco, Chinatown, ca. 1920)

One of the most spectacular artifacts of ancient times is the Cretan "poppy goddess." This terracotta piece, which dates to the late Minoan period (1400–1100 B.C.E.) and was in the shrine at Gazi, depicts a half-naked woman with raised hands who looks, ecstatically enraptured, into the distance and wears a headband into which three incised opium capsules have been placed. This poppy goddess has been interpreted as a "personification of the goddess of sleep or of death" (Sakellarakis 1990, 91).

A number of incised poppy capsules are depicted on the portal of the former Eleusinion in Athens. A golden tablet from Mycenae shows Demeter giving three poppy capsules to Perseus, the founder of the "mushroom city." A Boeotian plate shows the same goddess with a torch, two ears of grain, and two opium capsules. A coin of King Pyrrhus of Epirus depicts the goddess as the earth mother with ears of grain and opium capsules. In a terracotta relief from the Campani Collection, Demeter peers ecstatically into the infinite while holding spikes of grain and incised opium capsules in her two snake-entwined hands. A bouquet of ears of grain and poppy flowers is clearly recognizable on the mystical chest (*kiste mystica*) of the Eleusinian cult. Poppies and poppy capsules were portrayed on numerous ancient coins dating from the seventh century B.C.E. on (Seefelder 1996, 15).

Ancient Egyptian frescoes frequently depict the poppy, usually in association with mandrake fruits (*Mandragora officinarum*) and lotus flowers (*Nymphaea caerulea*). While some authors interpret the poppy that is shown as the opium poppy (Emboden 1995*), others usually see it as the Flanders poppy (*Papaver rhoeas*; Germer 1985*) or, more rarely, as the Oriental poppy (*Papaver orientale*; cf. *Papaver* spp.) (Seefelder 1996, 13). The Egyptian Museum in Berlin houses a (New Kingdom) statue of Isis as a cobra, surrounded by ears of grain and opium capsules.

In Ayutthaya, the ancient Siamese capital, incised poppy capsules were carved into quartz crystals during the fourteenth century. In Thailand (Siam) and Burma, "opium weights"—which were used to weigh other things besides opium—were made of metal alloys fashioned into the shape of animals (ducks, lions, birds, elephants). Regarded as symbols of luck, they were used even as a means of payment (Braun 1983; Greifenstein n.d., 55ff.). Today, they can be found only in antique shops. In the nineteenth century, numerous miniatures (book paintings) with erotic contents were painted in Thailand. Many of these depicted the so-called opium dens. Not only was a great deal of opium smoked in such places, but all forms of erotic play were indulged in as well (Haack 1984, 55, 121).

Over the course of time, numerous devices for

smoking as well as inhaling opium have been developed (Hartwich 1911*). An ivory opium pipe found at the shrine of Astarte (a predecessor of Aphrodite) at Kition (Cyprus) was dated to the twelfth century B.C.E. (Karageorghis 1976); it may be the oldest archaeological evidence of opium smoking in Europe. In Thailand, water pipes are usually fashioned from bamboo tubes and round gourds or coconut shells (*Cocos nucifera*). In China, water pipes were made from brass following the same principle. In China, Korea, and Japan, long, thin pipes with small bowls—which held exactly one dose of opium—were especially common. These pipes are frequently depicted in Chinese and Japanese art.

In the Middle Ages, opium was the subject of countless Arabic poems, stories, and novels (Gelpke 1995*). Many of the stories in *The Thousand and One Nights* either were inspired by opium or are direct descriptions of opium and its effects (Croutier 1989, 56).

In the nineteenth century, opium was both a very widespread people's drug, e.g., as "poppy tea" in England (London et al. 1990), and the drug of choice for many artists (Berridge and Edwards 1987; Kramer 1981). It was supremely important to many poets and writers, who immortalized it in their works (Hayter 1988). Novalis (1772–1801) sang the praises of opium in his *Hymnen an die Nacht* ("Hymns to the Night"), Edgar Allan Poe (1809–1849) wrote most of his work while under the influence of opium, and E. T. A. Hoffmann (1776–1822) also knew of and utilized the effects of opium. Charles Baudelaire (1821–1867) wrote about opium in *The Artificial Paradise* (cf. *Cannabis indica*) and worked his experiences into the collection of poems known as *The Flowers of Evil*.

From a literary point of view, Thomas De Quincey (1785–1859) had an especially important influence and helped set the tone for later authors and imitators. His book *The Confessions of an English Opium-Eater* appeared in London in 1822 and has served as a kind of template for later literary treatments of the effects of opium and its associated dependency.

Descriptions of the joys and sorrow of opium use have made their way into many novels and literary reports of self-experiences (such as diaries) (Gobbe 1895; Cocteau 1948; Detzer 1988; Ekert-Rotholz 1995; Jones 1700; Magre 1929; Schweriner 1910). Even the Opium War has become the subject of literary treatments (e.g., Fraser 1987; Thompson 1984).

In the nineteenth century, opium was the subject of many paintings. Carl Spitzweg (1808–1885) produced a painting in 1856 (*Chibuk Smoking Oriental on a Divan*) that portrays Oriental opium smoking (Seefelder 1996, 61). In his oil painting *The Siesta* (1876), John Frederick Lewis depicts a beautiful woman in Oriental garb,

inebriated on opium. His painting *In the Bey's Garden, Asia Minor* (1865) portrays a lady of the harem as she picks flowers next to a large opium poppy plant. Eugène Delacroix (1798–1865) used the same motif as the subject of his oil painting *Odalisque* (1845). The oil painting *Odalisque and Slave*, (1842), by Jean-Auguste-Dominique Ingres (1780–1867), shows a woman, inebriated on opium and almost naked, as her servant plays music for her. The eunuch in Jean-Léon Gérôme's (1824–1904) oil painting *The Guard of the Harem* (1859) is shown holding a meter-long opium pipe in his hand (Cloutier 1989, 31, 45, 55f., 124). *The Lazar's Room* (1873), a picture by Gustave Doré (1832–1883), has become a kind of archetype for the opium dens. In the art nouveau movement, the opium poppy was often used as a floral element or was placed at the center of focus.

Many nineteenth-century Japanese woodcuts depict erotic scenes in which lovers are shown smoking opium from long, thin pipes before, during, or after coitus and while drinking tea (*Camellia sinensis*) (Marhenke and May 1995*). The effects of opium also inspired several colored woodcuts by Katsushika Hokusai (1760–1849) (e.g., *Smoking Ghost*).

During the Golden Twenties, opium smoking was often portrayed in pictures and illustrations of Berlin society and other circles in Germany and in San Francisco. The drawings of Paul Kamm, Max Brüning, and D. Fenneker were especially popular and were published in several magazines (*Berliner Leben*, *Der Junggeselle*, and others). These illustrations played a great role in helping to develop the stereotype of the opium den (cf. morphine). A German emergency currency note (value two marks) of the time shows a physician armed with an enema syringe as he utters the words "I am Doctor Eisenbarth, I cure the people with my own art. The night watchman Didelum, I gave him 10 pounds of opium."

In several volumes of the popular children's book series Mecki, the hero, an anthropomorphic hedgehog, is shown smoking opium conspicuously often. His visions are shown in words and pictures (*Mecki among the Chinese*, 1958; *Mecki and Prince Aladdin*, 1958; *Mecki on the Moon*, 1959).

Opium is also a subject of several comic books (e.g., Hergé, *Tim and Struppi*, *The Blue Lotus*; Francis Leroy and Marcelino Truong, *The Bamboo Dragon*; Daniel Torres, *Opium*).

In music, the most conspicuous traces of opium can be found in Hector Berlioz's (1803–1869) *Symphonic Fantastique*, which serves as a kind of soundtrack for imagining an opium experience. Apart from this, almost nothing is known about the influence opium may have had on the music of the nineteenth century.

The cover of the album *Spitfire* (1976), by the

psychedelic band Jefferson Starship, shows a Chinese woman riding on a dragon growing out of the smoke of her opium pipe. A short-lived British neopsychodelic band of the mid-1990s was called Opium Den. The California avant-garde metal band Tool titled its first album *Opiate* (BMG 1992).

In the 1960s, a film version of De Quincey's *The Confessions of an English Opium Eater* was made in England.

Medicinal Use

As early as the time of the Middle Kingdom, the Egyptians were aware of the sleep-promoting effects of the poppy: "A remedy for too much crying in a child: spn [poppy] seeds; fly dung from the wall, is made to a paste, strained and drunk for four days. The crying will cease instantly" (Papyrus Ebers, 782, in Manniche 1989, 131*).

Such uses of the poppy and poppy juice have been preserved even into our day.²⁻⁴ In modern Egypt, opium is said to incite men to war and to love and to produce spectacular dreams. It is usually eaten mixed with spices, or it may be smoked. It is a popular aphrodisiac, especially in Oriental joy pills. The ancient Assyrians valued even the root as an aphrodisiac (Thompson 1949, 277*).

Opium was one of the most important medicines of the ancient Hippocratics, who used it to treat almost all illnesses, especially dropsy, diarrhea, uterine disorders, inflammations of rectal fistulas, hysterical complaints, and, of course, sleep disorders (Krug 1993*; Ratsch 1995a, 240–249*).

In Germanic folk medicine, poppy juice (opium) was taken internally to protect against nocturnal pests, bloodsucking vampires, nightmares, and nickel goblins (Höller 1990, 94*). As late as the twentieth century, phar macists were still making poppy pacifiers to calm small children (Nadler 1991, 58*). "The dried poppy leaves are only occasionally used as sedatives in folk medicine" (Heeger and Poethke 1947, 235).

Opium is used throughout the world as a folk medical treatment for coughing (cf. codeine) and diarrhea (Heurentin and Pelt 1987, 92f.*; Paulus and Ding 1987, 394*).

The opium poppy was also an important ingredient in poplar ointment (unguentum populeum; cf. witches' ointments). In her *Kräuterbuch* ("Herbal"), Elisabeth Blackwell wrote, "The leaves are taken among cooling ointments, they are considered useful for burned areas, inflammations, acute swelling, and come to the unguent. Popul." (Heilmann 1984, 106*).

Opium is used in homeopathy (usually in higher potencies) according to the medical description for such conditions as agitated states (Bomhardt 1994):

"Opium will expand beyond all measures,
Stretch out the limitless,
Will deepen time, make rapture
bottomless,
With dismal pleasures
Surfeit the soul to point of
helplessness."

CHARLES BACDELAIRE
"BOISSON"

"Baudelaire went
to a baseball game
and bought a hot dog
and lit up a pipe
of opium."

RICHARD BRAUTIGAN
(1968, 50*)



The art and literature of the Golden Twenties were shaped primarily by the use of opium and other psychoactive substances (morphine, cocaine). (Book title, 1920)

2-4 According to Langham (1379), children should be given the ground seed together with hemp (*Cannabis sativa*) and almonds in milk or beer (aet.).

"To Hypnos—
 a smoke offering of poppy seeds—
 Hypnos, who rules the departed
 and mortal humans without
 exception.
 As well as the living beings,
 as many as the broad earth
 nurtures—
 For you alone govern them all,
 you approach them all,
 with softly wrought chains
 binding the bodies, a remover
 of cares,
 giving comfort to the exertions
 and healing consolation to all
 afflictions.
 You turn away the worries of death
 and preserve the souls."

OPHID. HYMN



An opium smoker and paraphernalia:
 A) spoons for cleaning the pipe bowl;
 B) needle for picking up the opium;
 C) longitudinal view of the pipe bowl.
 (From Hartwich 1911)



The resurrection of Kore (Persephone)
 in spring. The goddess of rebirth,
 shown here in Minoan garb, bears
 three poppy capsules in her hand. The
 two plants in the sides of the goddess
 may be mandrakes. A man (rhizotome)
 is shown serving as a birth-helper.
 (Seal, Boeotia, fourth century B.C., P.)

Hahnemann said that the effects of poppy juice are more difficult to evaluate than almost any other medicine. The effects of opium, as they are expressed in the insensibility of the nervous system, the suppression of bodily functions, the sleepy dazed feeling, the lack of pain, the inactivity, the general sluggishness, and the lack of vital reactions, represent the main indications for the homeopathic use of this drug. (Boericke 1992, 571*)

Constituents

The entire plant (except for the roots and flower petals) contains a latex that coagulates into opium. Opium contains some forty alkaloids, known collectively as opium alkaloids. Opium can contain 5 to 23% morphine, 0.1 to 2% papaverine, 0.1 to 4% codeine, 1 to 11% narcotine, and 0.1 to 4% thebaine; the other alkaloids are present in only trace amounts (Heeger and Poetke 1947). The composition of the alkaloids, and in particular the morphine concentration, can vary greatly. Modern techniques make it possible to determine quickly the morphine content of a particular sample (Hsu et al. 1983).

Callus tissue has been found to contain the alkaloids sanguinarine, norsanguinarine, dihydro-sanguinarine, oxysanguinarine, protopine, cryptopine, magnoflorine, and choline (Furuya et al. 1972).

The characteristic scent of opium is the result of some seventy substances, of which pyrazine appears to play an especially important role (Buchbauer et al. 1994).

Poppy seeds contain practically no or only slight traces of alkaloids (Norman 1991, 49*). They are rich in oil, carbohydrates, calcium, amino acids (apart from tryptophan), and proteins. However, codeine can be produced from the seeds through the process of digestion with pepsin.

Effects

In the older literature, the effects of opium are compared to those of wine (cf. *Vitis vinifera*) remarkably often (Schmitz 1981, 384). All opium users make a clear distinction between the effects of smoked opium and those of ingested opium (Cocteau 1957, 86). When eaten or drunk, opium usually has stronger physical effects that are perceived as a paradisiacal state and blissfulness:

Opium . . . loosens the soul from its entanglements with everyday things and the outer world. . . . Opium makes one silent and gentle. It inspires and gives flight to the imagination, including the erotic, increases sensitivity and the sense of tenderness, while simultaneously diminishing the need to move and be active, the need to communicate,

ambition, sexual potency, emotions, and aggressiveness in general. (Gelpke 1995, 42*)

Descriptions of the effects of opium tend to place great emphasis on the cheerfulness that develops and the soothing effect this has upon the mood:

Opium . . . communicates serenity and equipoise to all the faculties, active or passive; and with respect to the temper and moral feelings, in general, it gives simply that sort of vital warmth that is approved by the judgment, and that would probably always accompany a bodily constitution of primeval or antediluvian health. Thus, for instance, opium, like wine, gives an expansion to the heart and the benevolent affections; but then, with this remarkable difference, that in the sudden development of kindheartedness that accompanies inebriation, there is always more or less of a maudlin character, which exposes it to the contempt of the bystander. . . . But the expansion of the more benign feelings incident to opium is no febrile access but a healthy restoration to that state the mind would naturally recover upon the removal of any deep-seated irritation or pain that had disturbed and quarrelled with the impulses of a heart originally just and good. (De Quincey 1998, 41)

Although the contents of the visions may be shaped substantially by the individual, there are many reports of their vegetative nature: "Opium is the only vegetable substance that communicates the vegetable state to us. Through it, we get an idea of that other speed of plants" (Cocteau 1957, 91E).

Opium users describe encounters with the soul of the plant, often in the form of an enchantingly beautiful and loving woman or goddess (Schwob 1969). Telepathic and clairvoyant states (e.g., seeing through walls) are often said to be characteristic of the effects of opium (Arsan 1974).

With irregular or occasional use of opium, the "ecstasy of the opiophage is strongly permeated with sexual conceptions, while parallel to this a strong arousal of the sexual apparatus [has been] observed" (Hirschfeld and Linsert 1930, 252*).

Opium's effects are the result of a synergy between the primary alkaloids: The main active constituent, morphine, has sedative-hypnotic, narcotic, antitussive, respiratory-suppressing, and constipating effects. Papaverine increases the flow of blood into the corpus cavernosum of the penis; codeine is the best cough medicine known. The effects of opium are manifested quite rapidly and persist for six to eight hours at an almost constant strength.

Among the undesirable side effects of opium use are constipation, nausea, and vomiting (which usually occurs the following day). Metoclopramide (e.g., Paspertin) is an effective antidote for these symptoms. Chronic use can lead to dependency structures with "addictive behavior." However, the so-called addictive potential of opium is not as great as portrayed by the sensationalistic press and uninformed politicians.

Commercial Forms and Regulations

The opium poppy is classified as a drug, trafficking in which is not allowed (German BtMG Anlage II). In Germany, only 10 m² of one's own garden may be planted with opium poppies. Since 1984, only "detoxified" poppy capsules, from which the morphine has been removed, may be sold in German flower shops. In Denmark, poppy capsules have been illegal for decorative purposes since 1986 (Koth et al. 1994, 536*).

Opium is subject to numerous drug laws throughout the world and may be prescribed only on special forms. Opium is available for sale today only in India and Pakistan (see *Cannabis indica*). It appears as though both the pharmaceutical lobby and organized criminals (Mafia) have a great interest in the difficulties associated with prescribing opium. As a result of these difficulties, the former is able to market its very expensive synthetic opiates and the latter are in a better position to sell illegal heroin.

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The German band Die Toten Hosen seems not to be propagating a new religion with its album *Opium für das Volk* ("Opium for the People") but to be intent on distributing the narcotic. (CD cover, 1996, RKP Records.)

"Here it pleases me well, in the circle of my light little poems to now make mention of the field poppy (*Papaver*), which the mother Latona partook of in sorrow for the rape of her daughter, so it is said, that loomed-for forgetfulness frees the least of its cares."

WALAHFRID STRABO
IN HANS-DIETER STOFFLER'S DER
HORTULUS DES WALAHFRID
STRABO, 1978, 16

"When I am under the spell of opium and the present has pulled away from my mental eye, then Chi-Chen and Chen-Hoa appear to me like two fairy-tale princesses, and it pleases me to rock in old, wonderful dreams. The smoking chamber Chen-Tas expands and becomes a magnificent marble palace in which I care for the divine peace as a sovereign prince. The tumult of Fouchow Road is submerged, and I feel myself surrounded by the majestic calm of the old forests in which my imperial ancestors once walked."

CLAUDE PARRERE
Opium
(1920, 151 f.)

"The Slovakian mother who wishes to heal her epileptic child walks fully dressed three times around it without anyone seeing her, and uttering a spell, she shakes from a poppy head the seeds into her hand and shakes these around the child; then the poppy is swept together and, with the cut-off nails of the fingers of one hand and the toes of one foot, but crosswise, from the right hand and the left foot or vice versa, she stuffs these into an internal tube and buries it where the sun will never shine."

SIGGFRIED SELIGMANN
*DIE MAGISCHEN HEIL- UND
SCHMERZMITTEL AUS IHR BELEBTEN
NATUR* [THE MAGICAL HEALING AND
PAIN-RELIEF AGENTS FROM THE
ANIMATED NATURE]
(1996, 219*)

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