

Silphium

Silphium (also known as silphion, laserwort, or laser) is an unidentified plant that was used in classical antiquity as a seasoning, perfume, aphrodisiac, and medicine.[1][2]

It was also used as a contraceptive by ancient Greeks and Romans.[3] It was the essential item of trade from the ancient North African city of Cyrene, and was so critical to the Cyrenian economy that most of their coins bore a picture of the plant. The valuable product was the plant's resin (laser, laserpicium, or lasarpicium).

Silphium was an important species in classical antiquity, as evidenced by the Egyptians and Knossos Minoans developing a specific glyph to represent the silphium plant.[4][5] It was used widely by most ancient Mediterranean cultures; the Romans, who mentioned the plant in poems or songs, considered it "worth its weight in denarii" (silver coins), or even gold.[2] Legend said that it was a gift from the god Apollo.

The exact identity of silphium is unclear. It was claimed to have become extinct in Roman times.[6] It is commonly believed to be a fennel relative in the genus *Ferula*,[1] perhaps a variety of giant fennel. The extant plants *Margotia gummifera*,[7] *Ferula tingitana*,[8] and *Ferula drudeana*[9] have been suggested as other possibilities. Another theory is that it was simply a high quality variety of *asafoetida*, a common spice in the Roman Empire. The two spices were considered the same by many Romans including the geographer Strabo.[10] In 2021, a study from Istanbul University identified *Ferula drudeana* as a likely candidate for silphium, matching both the appearance of silphium in descriptions and the spice-like gum-resin of silphium, though without a surviving sample no genetic analysis can be made.[11][9]

The identity of silphium is highly debated. It is generally considered to belong to the genus *Ferula*, as an extinct or living species. The currently extant plants *Margotia gummifera* [pt],[7] *Ferula tingitana*, *Ferula narthex*, *Ferula drudeana*, and *Thapsia garganica* have been suggested as possible identities.[1][9][8][12][13] Theophrastus mentioned silphium as having thick roots covered in black bark, about 48 centimeters long, or one cubit, with a hollow stalk, similar to fennel, and golden leaves, like celery.[2]

The cause of silphium's supposed extinction is not entirely known but numerous factors are suggested. Silphium had a remarkably narrow native range, about 125 by 35 miles (201 by 56 km), in the southern steppe of Cyrenaica (present-day eastern Libya).[14] Overgrazing combined with overharvesting have long been cited as the primary factors that led to its extinction.[6] However, recent research has challenged this notion, arguing instead that desertification in ancient Cyrenaica was the primary driver of silphium's decline.[15]

Another theory is that when Roman provincial governors took over power from Greek colonists, they over-farmed silphium and rendered the soil unable to yield the type that was said to be of such medicinal value. Theophrastus wrote in *Enquiry into Plants* that the type of *Ferula* specifically referred to as "silphium" was odd in that it could not be cultivated.[16] He reports inconsistencies in the information he received about this, however.[17] This could suggest the plant is similarly sensitive to soil chemistry as huckleberries which, when grown from seed, are devoid of fruit.[2]

Similar to the soil theory, another theory holds that the plant was a hybrid, which often results in very desired traits in the first generation, but second-generation can yield very

unpredictable outcomes. This could have resulted in plants without fruits, when planted from seeds, instead of asexually reproducing through their roots.[2]

Pliny reported that the last known stalk of silphium found in Cyrenaica was given to Emperor Nero "as a curiosity".[6]

A 2021 paper made the case that *Ferula drudeana*, an endemic species found in Turkey, is the true identity of Silphium based on similarity of appearance and production of a resin with supposedly similar properties to Silphium.[18]

Many medical uses were ascribed to the plant.[19] It was said that it could be used to treat cough, sore throat, fever, indigestion, aches and pains, warts, and all kinds of maladies. Hippocrates wrote:[20]

When the gut protrudes and will not remain in its place, scrape the finest and most compact silphium into small pieces and apply as a cataplasm.

The plant may also have functioned as a contraceptive and abortifacient.[8][21] Many species in the parsley family have estrogenic properties, and some, such as wild carrot, are known to act as abortifacients.[21]

Silphium was used in Graeco-Roman cooking, notably in recipes by Apicius.

Long after its claimed extinction, silphium continued to be mentioned in lists of aromatics copied one from another, until it makes perhaps its last appearance in the list of spices that the Carolingian cook should have at hand—*Brevis pimentorum que in domo esse debeant* ("A short list of condiments that should be in the home")—by a certain "Vinidarius", whose excerpts of Apicius[a] survive in one 8th-century uncial manuscript. Vinidarius's dates may not be much earlier.[22]

There has been some speculation about the connection between silphium and the traditional heart shape (♥).[23] Silver coins from Cyrene of the 6th–5th centuries BCE bear a similar design, sometimes accompanied by a silphium plant, and is understood to represent its seed or fruit.[24] Some plants in the family Apiaceae, such as *Heracleum sphondylium*, have heart-shaped indehiscent mericarps (a type of fruit).

Contemporary writings help tie silphium to sexuality and love. Silphium appears in Pausanias' *Description of Greece* in a story of the Dioscuri staying at a house belonging to Phormion, a Spartan, "For it so happened that his maiden daughter was living in it. By the next day this maiden and all her girlish apparel had disappeared, and in the room were found images of the Dioscuri, a table, and silphium upon it." [25]

Silphium as *laserpicium* makes an appearance in a poem (Catullus 7) of Catullus to his lover Lesbia (though others have suggested that the reference here is instead to silphium's use as a treatment for mental illness, tying it to the "madness" of love[26][27]).

In the Italian military heraldry, *Il silfio d'oro reciso di Cirenaica* ("Silphium of Cyrenaica, smoothly cut and printed in gold; in blazon: silphium coupé or of Cyrenaica") is the symbol granted to units that distinguished themselves in the Western Desert Campaign in North Africa during World War II.[28]

Italian coat of arms *Il silfio d'oro reciso di Cirenaica*

Silphium depicted on the arms of Italian Libya

