

READING 17-1

By Maria Lykoudis

In Search of Silphion

A botanical-horticultural riddle: what is the plant the Romans called *laser*, *laserpitium*, or *silphium*, the English *laserwort* or *magydare*, the Arabs *asa* (hence *asafoetida*), and the Indians *hing*? Answer: a plant that might be lost forever and the Greeks called it *silphion*.

I became interested in the silphion question in a curious way. My avocation is cooking, my training is in archeology, and my nationality is Greek. In an effort to reconcile my divergent interests I attempted to recreate some of the *grande cuisine* of ancient Greece, only to find that I lacked a vital and intriguing ingredient—silphion. Consider the problems of some future culinary sleuth in the 45th century trying to duplicate French cuisine of the 19th century without parsley. Hence, my journey in search of silphion.

Silphion must have been a wondrous condiment for it is lavishly referred to in Greek writings as early as the 7th century BC and is continually mentioned up to the 1st century AD. We find it later in books on diet and medicine and still alluded to in modern books on spices. We know it today from a combination of ancient manuscripts, medieval writings, and 19th century scholarship. From these we can deduce its nature, traits, properties, function, appearance, as well as its culinary and medicinal attributes.

Silphion, literally worth its weight in silver, was highly prized as a luxury item in antiquity and was sought after as a seasoning and a culinary enhancer. The region that produced the silphion *par excellence* was the well-watered plateau of Cyrenaica, a Spartan colony in Northern Africa, at the eastern tip of today's



Fig. 1. Cyrene was one of the Greek independent city-states on the Mediterranean coast of North Africa in what is now Eastern Libya. Cyrene gave its name to the surrounding region known until recently as Cyrenaica.

Gulf of Sidra in Libya. Cyrene, the main Greek city on the North African coast (Fig. 1), owed its renown to silphion. An example of Laconian pottery of 565 BC (Fig. 2) pictures King Arcesilas II of Cyrene (c. 568–550) in black and red cloak and hat, sitting on a chair supervising the weighing and loading of silphion wrapped in skins, ready for export. “Battus’ silphion” became a Greek expression for extreme wealth, Battus being the first king of Cyrene. The coins of Cyrene for centuries featured the plant whose gummy secretions were a royal export monopoly and constituted the wealth and pride of the land.

By the first century, the encyclopedic Pliny the Elder (23–79) tells us that the uses of silphion (which as a Roman he calls *laser*) would be “an endless task to record.”

Pliny’s account of silphion’s origin obtained from the “most reliable authors of Greece” (obviously Theophrastus) was that it “first sprang up in the vicinity of the Garden of the Hesperides at the edge of Great Syrtis (today’s Gulf of Sidra) after the ground had been suddenly soaked by a shower of rain the color of pitch, seven years before the foundation of the city of Cyrene (611 BC); that the effect of this rainfall extended over 500 miles of Africa, and that the silphion grew luxuriantly and wildly in that country as an obstinate weed.” Pliny refers to it as a “precious gift of nature” and informs us that in his day silphion was chiefly imported from Syria, the Syrian product being lesser in quality than the Parthian (Eastern Persia=Afganistan) but better still than the Median (Western Persia=Iran); however all of them much inferior to that of Cyrenaica (Eastern Libya). He mentions that Caesar during the dictatorship (49–44 BC) withdrew from the treasury gold and silver and 1500 pounds of true silphion. But, Pliny also tells us the silphion of Cyrene “is now wholly extinct; that only one stalk has been found within his memory, which was sent to the emperor Nero, because the sharecroppers (tax farmers) who rented pastures in Cyrene stripped it clean by grazing sheep.”

We deduce from other sources that the Cyrenaic silphion, although scarce in Pliny’s time, existed centuries later. Pliny talks insistently about the various Near Eastern and Middle Eastern silphia. A foul smelling relative of silphion known as *asafoetida*, survives and is still used today for medicinal purposes (carminative and antispasmodic) and as a condiment in South American and Eastern cooking, especially in India where it is mixed with various pulses. It grew and still grows in Iran and Afghanistan and in the area between the Caucasus and the Aral Sea. The many variants differ in aroma and taste.



Fig. 2. Laconian cup, ca. 565 BC, portraits King Arcesilas II of Cyrene (ca. 569–550 BC) supervising the loading of silphion. In the background of the cup, people and things including silphion are identified by name. This type of pottery was a popular export of Sparta. The original is in the Cabinet des Medailles, Paris.

The origin of the word *asafoetida* is interesting and pertinent to our problem. It would appear that the word *asa*, (*assa*, *aasa*) is the Arabised version of *laser* the Roman word for silphion. Laser is mentioned along with other products of India and the East among articles taxed in Alexandria in the second century AD, after Alexander the Great opened the Eastern markets to the Mediterranean world, through the city bearing his name in the last third of the 4th century BC. Modern Indian cookbooks characterize *asafoetida* as a sour digestive spice with a strong aroma. The suffix *foetida* describes the unattractive smell. An English epithet for *asafoetida*, “devil’s dung,” and the Afganistanian name “stink-finger” testify to the derogatory perception of the plant. The Cyrenaic silphion did not seem to share these attributes of *asafoetida*. On the contrary, references

to silphion laud its pleasant and enhancing qualities in taste and scent.

It appears likely that the Syrian, Parthian, and Median silphion and other so-called silphia of Pliny were all variants of asafoetida, bearing their own regional traits. Apparently the scarcity of Cyrenaic silphion elicited a change in taste through the acceptance of inferior substitutes. Almost any gum-producing plant even remotely resembling silphion became a candidate for filling the function previously reserved for the Cyrenaic species.

The extensive use of silphion in early sauces of the Greek and Roman cookery made it as important as celery and parsley are in the sauces of international cuisine, as frequent and familiar an ingredient as cognac and crème fraîche are in the cuisine of France. Hence, the recurring interest in silphion's history and fate.

In the 5th century BC Aristophanes (445–385 BC), the comic playwright satirizing the works and days of his fellow Athenians cannot refrain from portraying them eagerly preoccupied in the art of sauce-making: “Hand me the grater, bring in the silphion, you; now then, the cheese; blow up the fire somewhat!...” (*Birds*, Anchor A57, p. 65). And, in the same comedy speaking to the assemblage of birds, “...and if they decide on your flesh to sup, they don't just roast you and serve you up, but over your bodies, as prone ye lie, they grate their cheese and their silphion, too, and oil and vinegar add. Then a gravy luscious and rich, they brew.” (*Birds*, Anchor A57, p. 27). Antiphanes, an Athenian poet who visited Cyrene during the 4th century BC complains of the over promotion of Cyrene's two claims to fame: silphion and horses. He writes: “I will not sail back to the place from which we were carried away, for I want to say goodbye to all horses, silphion, chariots, silphion stalks, steeplechasers, silphion leaves, fevers, and silphion juice.”

A century later the poet and epicurean Arcestratus, near contemporary of Theophrastus, compiled a treatise entitled “Easy-life,” later retitled “Gastronomia” or “Gastrologia,” listing “the best edibles and the best drinkables” for the whole of Greece. The 330 verses that survive represent a culinary catalog then fashionable among ancient gourmets. Although not the first, his work was influential enough to earn him extravagant titles: “Commander of the Table,” “Hesiod of Connoisseurs,” “Theognis of Gourmets,” “New Sardanapalus,” and the “Inventive Genius of Cookery.” In his culinary account, he advises: “...eat boiled skate (crayfish) in mid-winter when it is in season and add to it cheese and silphion.” and further, “...and the stomach (tripe) and the womb of the sow boiled and dipped in cumin and in the strong vinegar and silphion.” Yet he admonishes his friends, “Do not allow anyone come near you when you bake sea wolf [lavraki—then and still, a great delicacy] neither Syracusan nor Italiote, for they do not know how to prepare them decently. But they ruin them and make a mess out of them with cheeses and sprinklings of the liquid vinegar and the silphion brine.” Arcestratus already knew to refrain from tampering with the subtlety of delicacies.

The art of cooking evolved from the heroic era of “fast foods” befitting warriors and chieftains (16th century BC, to elegance in the Golden Age of Athens (5th century BC), to decadence characterized by artificial sophistication and waste. By the early 6th century BC cooking had become a significant occupation of daily life, having undergone the transition from open fire preparation to the spice-enhanced savory dishes we come across in the works of Aristophanes and Arcestratus.

Precise identification of an “extinct” plant is a real problem. The coins of Cyrene from 570 to the 1st century BC despite of the limitations of size and style of the engravers provide us our best clue as to what silphion looked like. Pedanius Dioscorides (1st century AD) a Greek



Fig. 3. A Cyrenaic coin, ca. 500 BC, showing silphion on the obverse and the golden apple tree from the Gardens of the Hesperides on the reverse.

physician and the author of the famous *Materia Medica*, a source book for all medieval herbalists until the late Renaissance, may have provided drawings just when the coinage images leave off but contemporary manuscripts have not survived. The earliest extant manuscript, the 6th century *Codex Aniciae Julianae* contains only a drawing of the root in a crude rendition; a drawing of the whole plant is tantalizingly missing.

The earliest Cyrenaic coins feature the schizocarp (a double seeded fruit); the leaf alone occurs at least once and looks celery-like. Later on representations of the entire inflorescence (flowering stalk) is very frequent and by 500 BC we get ambitious compositions featuring entire plants or separate plant parts, often associated with divinities or animals. Figure 3 portrays one uncluttered and beautiful representation in a coin that dates from about 500 BC, featuring a silphion shoot on the obverse and the Garden of the Hesperides, which the Greeks had placed somewhere west of Cyrene, between that city and Gibraltar, on the reverse. The silphion on the coin reminds us of giant fennel (*Ferula communis*) or narthex, its Greek name—the same plant in which Prometheus hid the fire stolen from the gods. The word narthex denotes a plant with leaves enveloping or sheathing the stem. A recent photograph of *Ferula communis* from the vicinity of Evora, Portugal, (Fig. 4) displays obvious similarities to silphion on the Cyrenaic coins. We see the prominent leaf sheaths and umbels—bright yellow in the photograph. However, the characteristic ribbing of the stem carefully portrayed on the coins is absent and the inflorescence branches of giant fennel are alternate, as in most *Ferulas*, rather than almost opposite, as in the case of silphion represented on the coins. Evidence of the ribbing is confirmed on the sole piece of sculptural evidence we have from antiquity, the so-called silphion column (Fig. 5). An equally clear picture of silphion (Fig. 6) later in date, 420 BC, accents the ribbing

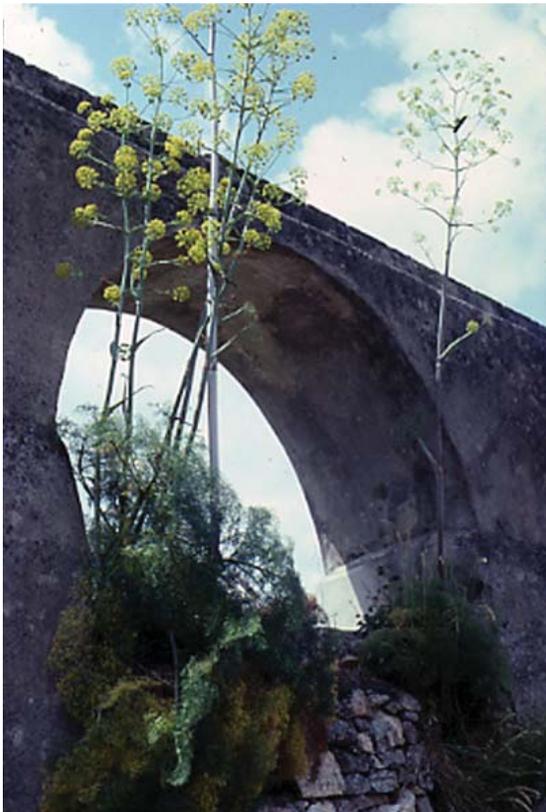


Fig. 4. Giant fennel or narthex (*Ferula communis*) a roadside weed from Evora, Portugal.

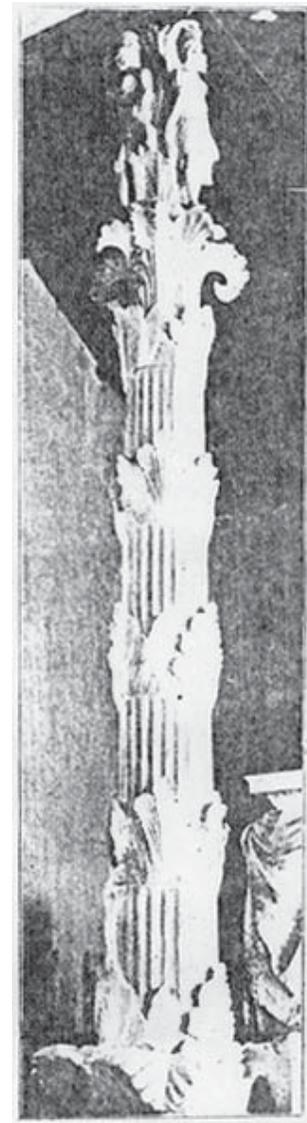


Fig. 5. One of the reconstructions of the silphion column now in the Museum at Delphi, Greece dating from the 5th to early 4th century BC.

of the stalk and the celery-like nature of the leaves.

It seems clear that silphion is a member of the Umbelliferae or carrot family and probably a *Ferula* but with more opposite branching in the inflorescence and a predominantly ribbed stem. Compare the silphion of the Greek coins, the giant fennel of Portugal, and the 19th century drawing of asafoetida (*Ferula narthex* Boiss., *Ferula asa-foetida* Falconer (Fig. 7), a resinous relative, and finally *Ferula tingitana* (Fig. 8), a native ferula of North Africa with which silphion has been identified by a number of botanists in the last century. Clearly these plants represent closely related species. Note that the representation of *Ferula tingitana* suggests a ribbing of the stem and the flowering stalk resembles that of the silphion on the coins.

The description contained in the writings of the Greek authors of antiquity provides further clues. The earliest detailed description comes from the treatise *Enquiry into Plants* of Theophrastus of Eresus (372–288 BC), the student and successor of Aristotle. The botanical writings of Aristotle are lost but Aristotle himself may be the source of this most famous of ancient botanical documents.

Theophrastus devotes an inordinate amount of attention to silphion and refers to it more than a dozen times. From Theophrastus (after the translation of Sir Arthur Hort, VI, III, 1-3) we learn that he thought of silphion as a “ferula-like” plant. He continues:



Fig. 6. A beautiful coin from the Cyrenaic city of Barce, ca. 420 BC, portraying silphion on the obverse and the head of Zeus Ammon on the reverse.

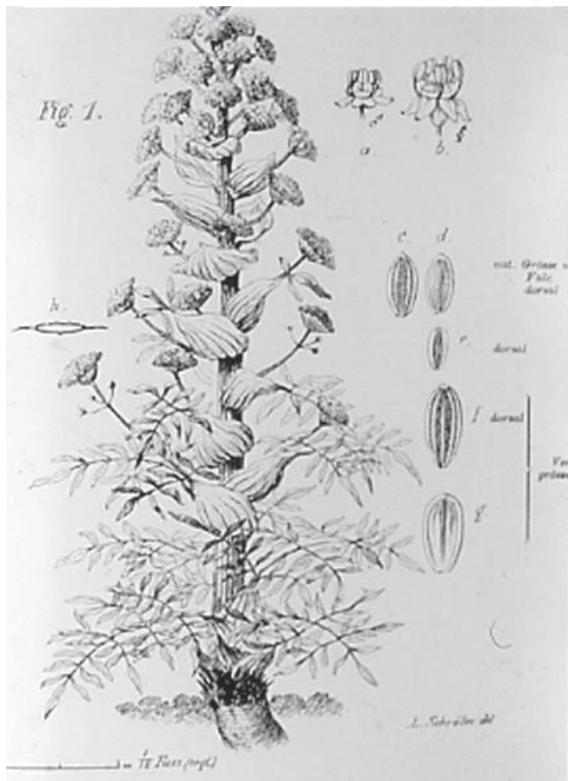


Fig. 7. *Ferula narthex* Boiss. (*Ferula asafoetida* Falconer) from a 19th century drawing.



Fig. 8. *Ferula tingitana*, a native plant of Northern Africa, probably a close relative of silphion, from Curtis' Botanical Magazine, volume 118, plate 7267, 1892.

The silphium has a great deal of thick root; its stalk is like ferula in size, and is nearly as thick; the leaf which they call maspeton, is like celery and of a golden color; it has a broad seed, which is leaf-like, and is called the phyllon. The stalk lasts only a year, like that of ferula. Now in spring it sends up this maspeton, which purges sheep and greatly fattens them, and makes their flesh wonderfully delicious; after that it sends up a stalk, which is eaten, it is said, in all ways, boiled and roast, and this too, purges the body in forty days. It has two kinds of juice, the 'stalk-juice,' and the 'root-juice.' The root has a black bark, which is stripped off. Others say that the root of silphion grows to the length of a cubit [about 18 inches] or a little longer, and in the middle of this is a head, which is the highest part and almost comes above ground, and is called the 'milk'; from this then grows the stalk and from that the magydaris which is also called the phyllon; but it is really the seed, and, when a strong south wind blows after the setting of the dog-star, it is scattered abroad and the silphion grows from it. The root and the stalk grow in the same year The plant called magydaris is distinct from silphion being of later growth and less pungent, and it does not produce the characteristic juice; experts can also easily distinguish it by its appearance. It grows in Syria and not in Cyrene and they say it is abundant on Mount Parnassus, and some call it silphion.

One sees that Theophrastus was uncertain at best on his terminology, confusing his successors including Pliny. Theophrastus also relates harvesting techniques which were carried out according to regulations. The juice was extracted by incisions at the top of the root which allowed exudations in “tears” or in a flow collecting in a hollow dug around the plant (Fig. 9). “When they were conveying it to Peiraeus, they put it in vessels and mixed meal with it, they shook it for a considerable time, and from this process it got its color, (reddish) and this treatment made it thenceforward keep without decaying.”

The passages of Theophrastus are clearly the source of all information about silphion. Later descriptions are commentary.

Theophrastus clearly defines a *Ferula* species with its large basal celery-like leaves and stalk-like inflorescence. Theophrastus is unclear about the word magydaris. He uses it as a synonym for the seed but later suggests that there is a plant by that name. Three hundred years later Dioscorides refers to the root of silphion as magydaris, and 1500 years later John Gerard refers to silphion as magydare or laserwort (wort is an old English word for root).

It is interesting that although Pliny (23–79) tells us explicitly that the Cyrenaic silphion is extinct and that it was mainly imported from Syria his contemporary Dioscorides when writing about the plant uses the present tense: “Silphion grows in Syria, Armenia, Media, and Libya, it ‘relliseth’ the mouth well being mixed with sauces and salt ... But of this that is the best which is somewhat red and transparent emulating myrrh and prevalent is the smell, not scenting like a leek, neither unpleasant to the taste The Cyrenaic one is very gentle to the smell”; Dioscorides is not the only contradictor of Pliny. A century later Arrian (96–180 AD) relates that in Mount Caucasus nothing grows save



Fig. 9. Collection of asafoetida gum from a drawing by Kampfer, 1742. The collection of silphion as described by Theophrastus and Pliny appears similar.

terebinth and silphion. Parenthetically he mentions that in Cyrene they fence off the silphion places so that the animals cannot get to them, and that the region bears all sorts of fruits and animals right up to the region where the silphion grows.

The problem with the written history of silphion is that the writers who dealt with the plant from Theophrastus on—be they historians or herbalists—do not state explicitly that they had a view of the plant itself and that their description was not based on common knowledge or hearsay. Later botanists who claim to have seen not silphion but asafoetida, also bemoan their having seen it out of season, or too late in the season, or complain that the specimens they had at their disposal were too poor to classify. The only person who says straight-forwardly that he saw silphion is Synesius, an aristocrat of Cyrene in the 5th century and Bishop of Ptolemais. He was given some silphion as a gift from someone who grew it in his garden. It was obviously still considered precious, and Synesius lovingly scolds the giver for such generosity.

John Gerard (1545–1612) the author of the famous English herbal of 1597, takes issue with Theophrastus and Dioscorides in respect to pronouncements on silphion, which he calls magydare or laserwort. He remains unconvinced that the ancients had a first-hand knowledge of the plant. (He doesn't convince me that he saw it either, for his account appears to be an adaptation or amalgamation of Theophrastus, Pliny, and Dioscorides.) He pleads: “Now then seeing the old writers being imperfect herein, it behooves us in this case to search with more diligence. There be sundry sorts of laser, the goodness whereof varies according to the country or clymate wherein the plant groweth. For the best groweth upon the high mountains of Cyrene and Africa and is of a pleasant smell. In Syria, Media, Armenia and Libya is of a most strong, detestable and lothsome savour and is called asafoetida.”

Gerard (not always to be trusted) also uses the present tense for the Cyrenaic silphion. He identifies with asafoetida all eastern variants. He agrees with his predecessors on the virtues of silphion, initially culinary, and following Dioscorides rather than Theophrastus, emphasizes its medicinal properties.

Interest in silphion revived in the 19th century with a renewed interest in classical studies. Writers on silphion included Henri Baillon (France), P. Ascherson (Germany), A.S. Oersted (Denmark) and Else Strantz (Germany), whose doctoral thesis was entitled *Zur Silphionfrage* (on the silphion question). This amazing bit of scholarship (unfortunately unavailable in English) contains practically every reference to the subject. Else Strantz, nevertheless, is noncommittal as to the identification of the plant. The consensus derived from all searchers is that botanically and descriptively, no plant can be recognized with certainty as the pride of Cyrene.

It was believed for a long time that Cyrenaic silphion was *Thapsia garganica*, a plant growing in Cyrenaica, also known as *Ferulago*, *Ferula sylvestris*, or *Selinum galbanum*, the same term reserved for the biblical galbanum. But thapsia is a composite, while the silphion is an umbelliferous plant. (*Thapsia* was sold in 19th century Paris, for pulmonary afflictions, as *silphion cyrenaicum*!) The Arabs have very early confused the nature of the two plants and called both thapsia and silphion “drias,” or “adrias” which might be a misheard version of magydaris. Ascherson expressed the hope that careful searching in the hinterland of Cyrenaica in the steppe zone where *Artemisia* (southernwood) grows might result in rediscovering silphion. A search appears to have been carried out by Italian botanists during an assessment of Italian African territories before world war II, but I have been unable to trace their reports.

Let us summarize what is known to us on the existence of silphion: Its miraculous beginnings are traced to Libya, where it arose according to the ancient tradition, seven years before the founding of the city of Cyrene by colonists from Sparta. The use of silphion seems to have undergone several phases: First came its glittering exclusivity reserved for the elite of ancient gourmands, with its fame carried abroad by the coinage of its native city. Its exorbitant price and the recipe of how to make it last indefinitely attested to its worth. Its increasing scarcity and gradual disappearance were due to harvesting techniques which insured the death of the plant before seeding, the encroachment of agriculture, and the relentless grazing of sheep and cattle. Adulteration with cereals and other substances was initially the method of preservation, which in Roman times became a necessity dictated by scarcity. Finally, lower quality variants widely grown in the near and Middle East were substituted. Eventually asafoetidias and other gum-producing plants entered

the picture. The cheap drove out the good.

Romantics still long for the identification of the true silphion as true believers search for the holy grail. It would appear that *Ferula tingitana*, which reportedly grows in the region, is the closest relative.

Perhaps the answer requires a more extensive exploration of North Africa, as P. Ascherson suggested in the last century. I eagerly await a botanist-explorer with a classical bent and a taste for the unusual, who, guided by the images of antiquity, will search among the 130 odd species of *Ferula* for the definitive word on the silphion of Cyrene and hopefully restore it to our gardens. In the meantime, I remain in search of silphion.

An Introduction to the Cuisine of Antiquity

For the brave and adventurous cook who will not mind experimenting with the taste of another era, I suggest the following recipes for a first acquaintance with the palate of antiquity. They are of the type that made an ordinary unpretentious Greek or Roman meal. All involve silphion or asafoetida.

All these recipes are included in the latest edition of *The Art of Cooking (De Re Coquinaria)* of Apicius, a Roman cookbook writer of the first century whose original text has undergone repeated adulterations, compilations, and amendments. The form of the present text is credited to a 4th or 5th century compiler by the translators, Barbara Flower and Elizabeth Rosenbaum (Harrap: London, 1958), who have tried most of the recipes.

In the absence of silphion, you will have to contend with asafoetida which was interchangeable with silphion by Apicius' time. Use it sparingly, one-fourth teaspoon is not very much, after all. It will be good to remember that the last King of Poland, Stanislas Auguste Poniatowski, was still rubbing the rim of his breakfast plate with asafoetida in the 18th century. For the ingredient called liquamen, a very common Roman concoction equivalent to our Worcestershire sauce, a trace of anchovy paste should do. For defructum, the must or residue of grape pressings, concentrated grape juice is a possible substitute. Unavailable ingredients will have to be omitted. Whatever the outcome, it will be nutritious.

Sauce with herbs for fried fish

Take any fish you like, clean, salt, fry. Pound pepper, cumin, coriander-seed, asafoetida root, origan (oregano), rue; pound well, moisten with vinegar, add Jericho date, honey, defructum, oil, liquamen, mix well, pour into a saucepan, bring to the boil. When it boils, pour over the fried fish. Sprinkle with pepper and serve.

Wombs from sterile sows

Serve with Cyrenaic silphion or asafoetida, blended with vinegar and liquamen. (This was then a well-known dish. Boiled tripe can be substituted for sow-womb.)

Lentils

Boil the lentils; when you have skimmed off the froth, put in leeks and green coriander. Pound coriander-seed, penny-royal, asafoetida root, mint, and rue, moisten with vinegar, add honey, blend with liquamen, vinegar, and defructum. [Pour over the lentils], add oil, stir. [Taste]: if something is wanting, add it. Thicken with flour, pour on best [olive] oil, sprinkle with pepper, and serve.

Barley soup with dried vegetables

Soak chick-peas, lentils, and peas. Crush barley, and boil with the dried vegetables. When it has boiled long enough, add sufficient oil, and chop the following greens: leeks, coriander, dill, fennel, beet, mallow, and tender cabbage. Put all these finely chopped greens into the saucepan. Boil cabbage, pound a generous quantity of fennel-seed, origan (oregano), silphion or asafoetida, lovage, and after pounding, blend with liquamen. Pour [this mixture] over the dried vegetables [and barley] and stir. Put chopped cabbage leaves on top.

Silphion sauce

Dissolve silphion from Cyrenaica or Parthian silphion in luke-warm water and mix with vinegar and liquamen; or mix pepper, parsley, dry mint, silphion root, honey, vinegar, and liquamen.

How to make one ounce of silphion last indefinitely:

Put the silphion in a large enough glass jar, together with about 20 pine-kernels. When you have to use the silphion, pound some of the pine-kernels, and you will be astonished at the flavor in your food. Replace the number of pine-kernels you have used in the jar.