



CYPERUS L. – GENERE

Order: Poales Small (APG IV); Cyperales Hutch. (Cronquist)

Family: *Cyperaceae* Juss.

Subfamily: Cyperoideae

Tribe: Cyperae

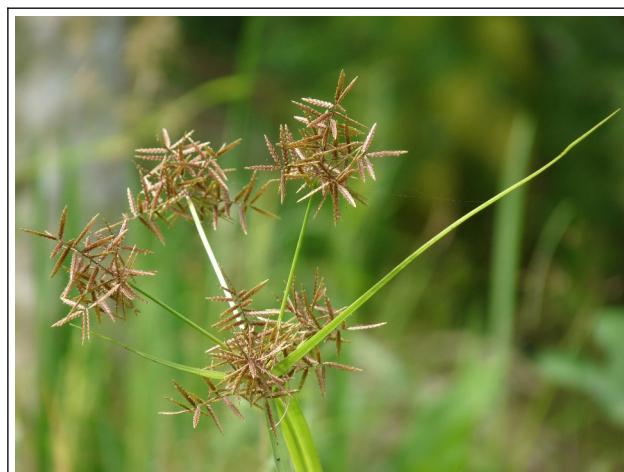
Cyperus L. is a large plant genus which, according to World Flora Online, includes about one thousand different species [WFO].

Among these, well known plants are the papyrus (*C. papyrus* L.) and the umbrella papyrus (*Cyperus alternifolius* L.).

C. rotundus L. is known both for its invasiveness and for its use in herbal medicine, while *C. esculentus* L. is known as a source of edible tuberlets.

CYPERUS ROTUNDUS L.

Syn.: *Cyperus olivaris* O.Targ.Tozz.



Cyperus rotundus L. [Kadavoor]

Primary functionality:

Secondary functionality:

<i>Nature:</i>	Hot and dry (between the second and the third degree)
<i>Taste:</i>	Pungent, aromatic, bitter and slightly sweet
<i>Tropism:</i>	Digestive system, circulatory system, female reproductive organs; entering meridians (TCM): Liver, San Jiao, Gallbladder, (Stomach)
<i>Humoral actions¹:</i>	Resolve tension stagnation and deficiency, supplement phlegm and blood, eliminate perverted humors (heat, toxic heat, thickened and/or accumulated phlegm, perverted melancholy)
<i>Clinical actions:</i>	Alterative, analeptic, analgesic, anthelmintic, antidepressant, antidiarrheal, antidysenteric, anti-inflammatory, anti-itching, antipyretic, antirheumatic, antispasmodic, astringent, carminative, cicatrizing, deobstruent, desiccative, diaphoretic, digestant (digests undigested material), digestive (increases the digestive power), diuretic, emmenagogue, galactagogue, hypotensive, lithonryptic, nootropic, orexigenic, stimulant, stomachic, thirst reliever, tonic (brain, heart, nervous system, stomach), vasodilator, vermicide, vulnerary
<i>Used parts:</i>	Tubers

Description

Also called *purple nutsedge* or *red nutsedge*, the plant is considered the world's most invasive weed. Luckily, enough, it is also one of the most important drugs in Chinese and Ayurvedic medicines.

According to Pliny, "*the roots of Cyperus, which are in great use, have the virtue of heating and drying without any mordacity. And therefore they are wonderfully beneficial to [those] ulcers which, being too moist, heal with difficulty: to which they are very suitable, for having a certain astringency. Which is the reason why they are also convenient for the orifices of mouth ulcers. In addition, it can certainly be confirmed that they also be somewhat incisive, since they help the stone, and cause menstruation and urine.*" (see [Mattioli]).

In Morocco, the tubers, like iris rhizomes, are used, mixed with food, for their analeptic property: they are indicated for weaklings, asthenics, convalescents and women who want to gain weight. They are also fed to students in order to improve their memory and boost their intelligence. [Bellakhdar]

According to Ayurveda, the *rasa* (taste) of *C. rotundus* (called *musta*, *mustaka*, *bhadramusta*, *motha*, *mutha*, and also *nagarmotha* or *nagarmusta*²) is classified as *katu* (pungent), *tikta* (bitter) and *kashaya* (astringent); its *guna* (properties) are *laghu* (light) and *ruksha* (dry), and its *virya* (potency) is *sita* (cold). The *vipaka* (taste after digestion) is *katu* (pungent). This drug reduces *kapha* and *pitta*, increases the digestive fire and digests undigested material (*ama*) [Frawley, Tyagi, Venkatasubramanian]. When taken in excess, it may increase *vata* [Frawley].

¹ See the "Notes on humors" paragraph.

² *Nagarmotha* and *nagarmusta* are common names shared with another sedge, *Cyperus scariosus* R. Br., also used in medicine, which properties are quite similar to those of *C. rotundus*.

The Ayurvedic text Charaka Samhita categorizes *musta* under the “*lekhaniya and medohara gana*,” that is remedies that are reputed able to counter obesity and high cholesterol, helping expel excess fat and *kapha* from the body. Some studies confirm this effect of the herb. [CureJoy]

Musta is considered one of the most important herbs for treating female disorders because it relieves menstrual pain and dispels premenstrual congestion of blood and water. It is one of the most effective menstrual regulators [Frawley, Nalini], and is particularly good for the emotional problems of PMS, i.e. depression or irritability. [Frawley]

It is also one of the best digestive stimulants for *pitta* constitution and an effective stimulant for the liver. It improves absorption in the small intestine and thereby stops diarrhea, while at the same time helping to destroy parasites. It may be helpful in candida infections. It is effective in chronic fevers and for promoting digestion in such conditions as gastritis. With ginger and honey it is a good all-purpose medicine for improving digestion. [Frawley]

Franz Vermeulen, citing [Sala], reports: “*The tubers are bitter, acrid, astringent, cooling, anti-inflammatory, galactagogue, depurative, intellect promoting, nervine tonic, digestive, carminative, anthelmintic, stomachic, constipating, diuretic, lithotriptic [dissolving stones], expectorant, diaphoretic, emmenagogue, vulnerary, febrifuge, anti-periodic [anti-malaria] and tonic; and are useful for hyperdipsia [intense thirst], inflammations, agalactia, leprosy, skin diseases, scabies, erysipelas, pruritus, dementia, neurasthenia, epilepsy, anorexia, dyspepsia, flatulence, colic, verminosis, diarrhoea, dysentery, strangury, renal and vesical calculi, cough, bronchitis, amenorrhoea, dysmenorrhoea, wounds, ulcers, fever, intermittent and malarial fevers, vomiting, ophthalmia and general debility.*” [Vermeulen]

According to Chinese Medicine, *C. rotundus* rhizome (called *Xiang Fu*) is one of the herbs that regulate *Qi*. Some authors consider it the primary *Qi* regulating herb of Chinese Medicine [ITMOnline].

Jiao Shu-De writes: “*Acrid and slightly bitter in flavor and neutral in nature, xiāng fù (cyperus) is the most commonly used qì-rectifying and depression-opening medicinal. It is diffusing in nature and is able to free the qì aspect of the twelve channels and eight vessels. In older literature, it was said to ‘govern all qì,’ resolve the six depressions (qì depression, blood depression, phlegm depression, food depression, damp depression, and fire depression)³, and regulate menstruation.*

[...] *Xiāng fù is aromatic, acrid, and dissipating. It regulates qì, soothes the liver, and resolves depression. It treats liver qì depression due to inhibited emotions, which manifests in abdominal fullness and distention, rib-side distention and pain, no pleasure in eating, and oppression in the chest with a liking for long exhalation.*

[...] *Xiāng fù (cyperus) moves qì and frees stagnation; when there is free flow, there is no pain. Xiāng fù is most commonly used for qì stagnation and stomach pain (stomach pain caused by anger, or stomach pain exacerbated by bad moods, with rib-side distention and pain, and stringlike pulse, etc.).*

[...] *Because xiāng fù is a qì moving medicinal that can also enter the blood aspect, it is traditionally called a ‘qì-in-blood medicinal’ (that is, a qì-moving medicinal that enters the blood aspect). It rectifies qì and regulates menstruation (adjusts the menstrual cycle), and it is effective for signs such as menstrual irregularities, overdue periods, and abdominal pain during menstruation that are due to liver qì depression in emotionally inhibited women.*

³ The term *depression*, used here, refers to stagnation of circulation.

[...] *Xiāng fù* (cyperus) also conducts blood-supplementing medicinals to the qì aspect in order to engender blood. It is used in combination with other medicinals to treat any antepartum or postpartum pathocondition, and for this reason it is traditionally said to be ‘an important women’s medicinal.’” [Shu-De]

C. rotundus is used to disperse and spread stagnant Liver and Stomach Qi and relieve depression in case of:

- Liver Qi stagnation with hypochondriac pain and epigastric distention
- disharmony between the Liver and spleen

and to adjust menstruation and alleviate pain in case of gynecological disorders due to Liver Qi stagnation with dysmenorrhea or irregular menstruation. [AmDragon, Li Wei]

It is indicated for:

- problems involving emotional stagnation (irritability),
- distension and fullness in the stomach and abdomen, distension and pain in the hypochondrium due to binding depression of Liver Qi, distension and pain in the breasts due to Liver depression and Qi stagnation,
- menstrual problems (best when there is *scanty bleeding*),
- cold *Shan* disorders⁴. [AmDragon, Li Wei]

This herb is also said to treat melancholy. Moreover, *C. rotundus* is one of the most commonly used analgesics for abdominal pain (especially upper abdominal pain) [AmDragon].

In China it is among the ten highest rated anti-fertility plants. [Vermeulen]

The nature of raw *Xiang Fu* is to move outwards; processed *Xiang Fu* enters the Liver and Kidney channels and is used for lower back and leg disorders; *Xiang Fu* mix-fried with alcohol can free the channels; *Xiang Fu* mix-fried with vinegar is good for dispersing accumulation; *Xiang Fu* mix-fried with ginger juice can transform Phlegm-fluids; and charred *Xiang Fu* is mainly used for uterine bleeding and profuse menstruation. [Li Wei]

Frying it in vinegar enhances the herb’s ability to enter the Liver channel and alleviate pain. Frying it in wine enables it to penetrate all the channels. [ChinHerbInfo]

C. rotundus is the most frequently prescribed single herb for treating endometriosis in TCM (mean dose of 1.04 g per day and 29.4 days per year). [Su]

Modern research has shown that *C. rotundus* has an inhibitory effect on both pregnant and non-pregnant uteri in animals. Its rhizomes has a tranquilizing effect. [Li Wei]

Some Unani authors classify *C. rotundus* as a *Mufarrehat* (exhilarant), due to its ability to lift the mood and improve depression [Anwar]. Indeed, ethanolic extracts of the plant and some of its fractions have shown antidepressant action, possibly acting via enhancement of binding of endogenous ligands to GABA_A-benzodiazepine Receptor Complex [Anwar, Ha, Hao, Lin, Sheik].

C. rotundus contains sesquiterpenes (α -cyperone, β -selinene, cyperene, cyperotundone, patchoulone, sugeonol, kobusone, and isokobusone) and other terpenes, such as pinene (a monoterpene), and several sesquiterpene derivatives, such as cyperol, isocyperol, and cyperone.

⁴ Hernial and genitourinary disorders.

The dried rhizome contains about 0.5-1% of volatile oil; the prolonged cooking of the herb will cause loss of some portion of these constituents. [ITMOnline]

The volatile oil extracted from *C. rotundus* rhizomes has shown oestrogen-like activity in rats [Li Wei, Vermeulen, Wang].

In Siddha medicine, the tuber paste is used to increase the size of the breasts [Saraj].

The leaves of *C. rotundus* are widely used to flavor food, especially in the Middle East and Southeast Asia. [Wang]

Properties

Temperature and taste

The taste of *C. rotundus* tubers is described differently by the different medicinal traditions; for instance, it is classified as acrid, slightly bitter and slightly sweet in TCM (see [AmDragon, Li Wei]), as bitter and sharp according to Unani (see [Hana]).

A contemporary author, Stephen Facciola, describes the taste of the fresh tuber as resembling that of 'Vicks VapoRub'⁵, and becoming milder after drying. [Facciola]

Surely the taste of *C. rotundus* tuberlets can be described more completely as pungent, aromatic, bitter and slightly sweet (due to starch).

The temperature is neutral according to TCM [AmDragon, Li Wei], hot and dry in the second degree according to John Gerard [Gerard], hot and dry in the third degree in Unani-Tibb [Hana], or simply hot and dry according to Pietro Andrea Mattioli, which reports from Plinius: "*the roots of Cyperus, which are in great use, have the virtue of heating and drying without any mordacity*". Similarly, Castore Durante: "*It is fragrant, and has the ability to heat and dry without any mordacity; it corroborates, astringes, incides and is aperient*" [Durante]

Signature

N/A

Tissue phases

N/A

Actions and indications

Humoral actions

Being aromatic, pungent, sweet and bitter, the tubers of *C. rotundus* have a complex activity. The pungency is responsible for their ability to "put in motion" (heat, blood, body fluids and so on) and to resolve tension stagnation, and, together with the sweetness, also supplements tension in case of deficiency. Their bitterness together with their sweetness makes them able to supplement

⁵ Probably also due to the peppery aroma imparted by rotundone, a sesquiterpene contained in the essential oil of *C. rotundus* tubers.

the phlegm and (also thanks to their warm nature) the blood without causing stagnation, and, at the same time, to stimulate the elimination of perverse humors (nutritive and alterative properties).

Tropism

According to David Frawley and Vasant Lad, *C. rotundus* mainly acts on the digestive system, the circulatory system and the female reproductive organs. [Frawley]

According to TCM, the drug enters the Liver, San Jiao [AmDragon, Li Wei], Gallbladder, (Stomach) [AmDragon] meridians.

Clinical actions

Alterative, analeptic, analgesic, anthelmintic, antidepressant, antidiarrheal, antidysenteric, anti-inflammatory, anti-itching, antipyretic, antirheumatic, antispasmodic, astringent, carminative, cicatrizing, deobstruent, desiccative, diaphoretic, digestant (digests undigested material), digestive (increases the digestive power), diuretic, emmenagogue, galactagogue, hypotensive, lithontryptic, nootropic, orexigenic, stimulant, stomachic, thirst reliever, tonic (brain, heart, nervous system, stomach), vasodilator, vermicide, vulnerary.

Principal actions

Alterative. [Frawley, Hana]

Analeptic⁶ [Bellakhdar, Durante, Mattioli]:

- Liter.: “*They are indicated for weaklings, asthenics, convalescents and women who want to gain weight.*” [Bellakhdar]

Analgesic. [Imam]

Antidepressant. [Anwar, Ha, Hao, Lin, Sheik].

Antidiarrheal, antidysenteric. [Imam, Tyagi, Venkatasubramanian]

Anthelmintic. [Frawley, Imam, Nalini, Samraj, Tyagi, Venkatasubramanian]

Anti-inflammatory. [Imam]

Anti-itching. [Venkatasubramanian]

Antipyretic. [Hana, Tyagi, Venkatasubramanian]

Antirheumatic. [Imam]

Antispasmodic. [Frawley]

Astringent. [Frawley, Hana, Samraj, Tyagi, Venkatasubramanian]

Carminative. [Frawley, Hana, Imam]

Deobstruent. [Hana]

⁶ CNS stimulant which is able, in particular, to provide a transient stimulus to the cardiovascular system and/or the respiratory system.

Desiccative. [Hana]

Diaphoretic. [Hana]

Digestant (digests undigested material). [Tyagi, Venkatasubramanian]

Digestive (increases the digestive fire). [Tyagi, Venkatasubramanian]

Diuretic. [Durante, Hana, Imam, Mattioli]

Emmenagogue. [Durante, Hana, Frawley, Imam, Mattioli]

Galactagogue [Imam, Jebasingh, Sala, Vermeulen]:

- Increases and purifies breast milk. [Jebasingh, Nalini]
- Fresh tubers are applied to the breast (as a paste or warm plaster). [Imam, Nalini]

Hypotensive. [Imam, Sivapalan, Tyagi]

Lithonryptic. [Durante, Mattioli, Sivapalan, Vermeulen]

Nootropic [Bellakhdar, Dhar, Hana, Kandikattu]:

- Memory enhancer. [Hana]
- Liter.: *"They are also fed to students to improve their memory and boost their intelligence."* [Bellakhdar]

Orexigenic (Ayurveda: rocaka), appetizer. [Hana, Samraj, Tyagi, Venkatasubramanian]

Stimulant. [Frawley, Imam]

Stomachic. [Imam, Samraj]

Thirst reliever. [Tyagi, Venkatasubramanian]

Tonic [Hana, Vermeulen]:

- Brain tonic. [Hana]
- Heart tonic. [Hana]
- Nervous system tonic. [Hana, Vermeulen]
- Gastric tonic. [Hana]

Vasodilator. [Hana]

Vermicide. [Hana]

Vulnerary, cicatrizing (external use) [Durante, Hana, Mattioli]:

- Liter.: *"This is dried up, and sprinkled, ground into flour, in the corrosive sores of the mouth."* (Dioscoride, v. [Durante, Mattioli])

Specific indications

Mind

- Depression, melancholy. [AmDragon, Anwar, Ha, Hao, Lin, Sheik]
- Irritability. [AmDragon]

General

- Fever [Imam, Saraj, Tyagi, Venkatasubramanian]; chronic fever [Frawley]; intermittent fever, malaria [Hana, Imam, Nalini, Tyagi, Vermeulen].
- Inflammation, burning sensation [Tyagi, Venkatasubramanian]:
 - Hernia pain. [Wang]
 - Chest pain. [Nalini]
 - Rheumatoid arthritis. [Nalini]
- Candida. [Frawley]
- Cancer. [Vermeulen]
 - Cervical cancer. [Vermeulen]
- Leprosy. [Sala, Saraj, Wang]

Nervous system

- Epilepsy. [Hana, Sala, Saraj, Vermeulen]
- Headache. [Hana]

Urinary system

- Dropsy. [Durante, Mattioli]
- Kidney stones [Durante, Mattioli, Sivapalan, Vermeulen], bladder stones [Sala, Vermeulen].
- Strangury. [Hana]
- Burning micturition. [Nalini]

Respiratory system

- Cough. [Durante, Vermeulen]
- Asthma. [Nalini]
- Bronchitis. [Nalini, Sala, Vermeulen]

Cardio-circulatory system

- Palpitations. [Hana]
- High blood pressure [Imam, Sivapalan, Tyagi]:
 - Liter.: “*Musta has hemodynamic properties that help optimize blood flow and stimulate respiration. Researchers also confirmed its hypotensive effect, showing that alcoholic*

extract of musta can bring about a persistent yet gradual reduction in blood pressure.”
[Sivapalan]

Digestive system

- *Epigastric and hypochondriac distention and pain* (TCM: Liver and Stomach Qi stagnation). [AmDragon, Li Wei]
 - Abdominal pain (especially upper abdominal pain). [AmDragon]
 - Distension and fullness in the stomach and abdomen, distension and pain in the hypochondrium. [Li Wei]
 - Liter.: *“abdominal fullness and distention, rib-side distention and pain, no pleasure in eating, and oppression in the chest with a liking for long exhalation”* [Shu-de]
 - Flatulence. [Hana]
 - Spasms. [Hana]
- Diarrhea, dysentery. [Frawley, Imam, Nalini, Saraj, Shinde, Tyagi, Venkatasubramanian]
- Cholera. [Shinde]
- Indigestion. [Frawley, Tyagi, Venkatasubramanian, Vermeulen]
- Helminthiasis, parasites. [Frawley, Imam, Nalini, Samraj, Tyagi, Venkatasubramanian]
- Anorexia, loss of appetite or interest for food (Ayurveda: *aruchi*) [Venkatasubramanian]; orexigenic [Tyagi].
- Gastric weakness, malabsorption. [Frawley, Hana]
- Gastric mucus. [Hana]
- Nausea. [Hana]
- Vomiting. [Saraj, Shinde, Vermeulen]
- Halitosis. [Hana]
- Hemorrhoids. [Hana]
- Hyperdipsia (excessive thirst) [Vermeulen]; thirst reliever [Tyagi, Venkatasubramanian]; polydipsia in diabetes [Nalini].
- Obesity, hyperlipidemia. [Hana, Imam, Nalini, Tyagi]

Liver

- Sluggish liver. [Frawley]
- Jaundice. [Hana]
- Hepatitis (in formulas). [Parvez, Varma, Xu]

Female sex organs

- *Dysmenorrhea or irregular menstruation* [AmDragon, Frawley, Nalini]
 - with *irritability, and epigastric and hypochondriac distention*. [AmDragon]
 - with *scanty bleeding*. [AmDragon]
 - Liter.: “When treating menstrual dysfunction, Xiang fu is preferred when there is scanty bleeding, while Mei gui hua (*Rosae Rugosae Flos*) is more ideal for excessive bleeding.” (Bensky/Gamble) [ChinHerbInfo]
- *Endometriosis* (also as a simple). [Su]
- Distension and pain in the breasts (TCM: Liver depression and Qi stagnation). [Li Wei]
- Agalactia [Sala, Vermeulen], oligogalactia (galactagogue) [Imam, Jebasingh].

External use

- Ulcers [Mattioli, Nalini], mouth ulcers [Mattioli]:
 - Liter.: “They are wonderfully beneficial to ulcers which, being too moist, heal with difficulty” (Plinio; v. [Mattioli])
- Scorpion sting. [Durante, Hana, Mattioli]

Parts used and their collection

For medicinal use in China, the underground portion is collected in autumn, cooked for a short time in boiling water or steamed, with the fibrous roots burnt off; the rhizomes are sliced in half down the center, and dried in the sun. [ITMOnline]

Preparation and dosage

Purple nutsedge can be taken as a powder (Ayurveda: 250 mg to 1 g [Frawley]), as a decoction (TCM: 6-14g, being careful not to boil it for too long to avoid loss of essential oil [AmDragon, Li Wei]; Ayurveda: low simmer [Frawley]; Unani: 3.5-4.5g [Hana]), or as a tincture (2-4ml [AmDragon]).

According to TCM:

- processed Cyperus (*Zhi Xiang Fu*) is most effective at dredging the Liver and alleviating pain.
- Black Cyperus (*Hei Xiang Fu*) is able to enter the Liver Blood level to harmonize Blood and stop bleeding to treat irregular menstrual bleeding.
- Dry-fried Cyperus (*Chao Xiang Fu*) regulates pain due to Qi stagnation.
- Four (substance) Prepared Cyperus (*Si Zhi Xiang Fu*) is less likely to exhaust Qi and dry the Yin and Yang fluids. It is better able to promote the flow of Qi, unblock the collaterals, reduce accumulation and alleviate pain to treat deficient patients with pathogenic obstruction. [AmDragon]

Contraindications and collateral effects

C. rotundus is a safe and effective herb that is also used as food. In an experiment, rats were able to tolerate feeding with a mixture containing up to 25% of the herb, but when the proportion was increased to 30-50%, growth was inhibited. [Li Wei]

The LD₅₀ (acute toxicity) of alcoholic extracts of *C. rotundus* administered via intraperitoneal route in mice has been reported to vary within a wide range of values, e.g., from 240 mg/kg [Pal] to abt. 1500mg/kg [Li Wei].

As for the oral administration, acute toxicity tests performed on rats and mice with single doses of up to 5,000 mg/kg of the ethanol extract of *C. rotundus* rhizome did not cause any mortality or evident signs of toxicity. In a subacute toxicity test, the administration of the ethanol extract of the rhizomes of *C. rotundus* at a dose of 1,000 mg/kg daily over 14 days did not cause mortality, behavioral changes, or difference in body weight gain with respect to the control group. Another sub-chronic toxicity study revealed that food and water consumption and body weight of animals didn't vary significantly, but the hematological parameters showed an increase in WBC count and hemoglobin level. [Dhar, Jebasingh, Nidugala, Thanabhorn]

Although some authors report that *C. rotundus* is employed in the treatment of vomiting of pregnancy (e.g., [Shinde]) and “to treat any antepartum or postpartum pathocondition” [Shu-de], some studies report that the plant extracts exhibited inhibitory effects against fetal growth of rats and mice during pregnancy [Hendry, Nurcahyani]. Moreover, due to estrogen-like activity of its essential oil and its action upon uterine mucous membrane, it is contraindicated (or at least it must be used with caution) during pregnancy (see also [AmDragon]).

Being astringent, it should be used with caution in people with constipation. [AmDragon, Frawley]

Since it may increase *vata* when used in excess, it should be used with caution also in people with high *vata*. [Frawley]

Moreover, according to TCM, *C. rotundus* is contraindicated in case of:

- Qi Deficiency without stagnation [AmDragon, Li Wei]
- Yin Deficiency with Heat signs [AmDragon, Li Wei]
- Heat in the Blood. [AmDragon]

Homeopathy

C. rotundus has not been subjected to homeopathic proving.

CYPERUS ESCULENTUS L.

Cyperus esculentus L. (also known as *yellow nutsedge*) also produces small tubers, known as *tigernuts*, *chufa* (Spanish) or *xufa* (Catalan). Due to their sweet and slightly aromatic taste, the tuberlets are mainly used as food, either raw or cooked. They are also used to make a vegetable milk called *orchata/orxata* in Spanish/Catalan.

Besides that, tigernuts are also endowed with medicinal properties. They activate blood circulation, favor weight loss, and are considered aphrodisiac, galactogen, spermatogen, carminative, diuretic, stimulant and tonic. They can be used in case of flatulence, indigestion, diarrhea, dysentery and excessive thirst [Bellakhdar, Sabo].

According to John Gerard, the vegetable milk prepared with tigernuts "*mundifies the breast and lungs*" (so it is indicated for cough) and is also good "*against the heat and sharpness of the urine*". The tigernuts "*are somewhat windy*." [Gerard]

C. esculentus has not been subjected to homeopathic proving.

CYPERUS LONGUS L.

Cyperus longus L., also known as *English galingale* due to the appearance of the rhizome (similar to true galangal) and its aromatic flavor, does not have underground tubers but rather a horizontal rhizome. It has a pungent flavor and its odor, which is accentuated by dry storage, is reminiscent of nard and violet. [Bellakhdar]

For this reason it was once used as a condiment in soups, pâtés and desserts and as a substitute for ginger and true galangal. The stem of the plant gives off the same smell, but less pronounced. The rhizome is also used in perfumery. [Batelli, Bellakhdar, Vermeulen]

Due to its smell, in Morocco the drug is said to keep evil spirits and bad luck away. [Bellakhdar]

The rhizome is considered an aromatic tonic, a stomachic, an emmenagogue, and a diuretic serviceable in the first stages of dropsy [Batelli, Grieve]. It is also "*used by those with mouth ulcers, or bad teeth to strengthen the gums and correct the bad smell*." [Farina]

John Gerard and Pietro Andrea Mattioli write about both *C. rotundus* and *C. longus*, not mentioning any specific difference between the two plants with respect to the medicinal actions. The authors report that both are diuretic and emmenagogue, useful in case of urinary stones and dysmenorrhea, and are also able to treat the sting of scorpions and the bites of serpents and to heal running ulcers of mouth, genitals and buttocks. [Gerard, Mattioli]

According to Jan Scholten it is able to treat giddiness, mouth ulcers, abdomen flatulence and colic, dropsy, water retention, and to strengthen the bowels. [Scholten]

Gerard also reports that, according to Jean Fernel (Fernelius), "*it increaseth blood by warming the body, and maketh good digestion; wonderfully refreshing the spirits, and exhilarating the mind, comforting the senses, and encreasing their liuelinesse, restoring the colour decayed, and making a sweet breath*." [Gerard]

C. longus has not been subjected to a true homeopathic proving.

NOTES

Notes on humors

According to the Hippocratic-Galenic medicine, four humors rule the human body:

- *Bile* (or *Yellow Bile*), corresponding to the Fire element, responsible for all the caloric activities of the human body, both in a physiological sense (e.g., body heat) and in a pathological sense (fever, inflammation, etc.);
- *Blood*, corresponding to the Air element and to the physical blood;
- *Phlegm* (also called *Pituita* or *Lymph*), corresponding to the Water element, responsible for everything that is fluid in the body (body fluids, lymph, blood plasma, synovial fluid, cerebrospinal fluid, etc.)⁷;
- *Melancholia* (also called *Black Bile*), corresponding to the Earth element, responsible for everything that is hard and structured (bones, teeth, but also growths, polyps, stones, tumors, etc.).

Heat and body fluids are governed by Yellow Bile and Phlegm respectively. When there are no further specifications, the terms “heat” and “fluids” can be used, in this text, to indicate the corresponding humor.

The functioning of the whole body is governed by the mixing (*crasia*) of such humors: if the ratio between the humors is proper (we speak of *eucrasia*), the body functions at its best and the health is guaranteed; if they are blended improperly (we speak of *discrasia*), illness results.

A humor is defined *correct* when both its “quantity” and its “quality” are proper; when it prevails over the others, generating dyscrasia, it is said that it is *superabundant*, and when its quality is not appropriate it is said that it is *corrupt*. We say in general that a humor is *perverse* when it is overabundant or corrupt. In this text, in order to facilitate comparisons between different systems of medicine, we resort to an extension with respect to the classical conception and define a humor as “perverse”:

- when its “quantity” is not optimal, that is, it is excessive (superabundant humor) or deficient (deficient humor) with respect to the condition of eucrasia (the classical theory allows only excess; deficiency is due to the prevalence of another humor with opposite qualities), or
- when its “quality” is different from the physiologically appropriate one (corrupt humor)⁸.

An excess of heat in the body can overheat and “cook” the humors, altering their characteristics. Phlegm thickens and becomes more viscous, giving rise to the so-called *thickened Phlegm*. If the excess heat is important or lasts for a long time, all humors can end up “burning” (in

⁷ In this sense, it is conceptually different from the *Phlegm* of Chinese medicine, which corresponds specifically to the *thickened Phlegm* of humoral medicine when it is located in the upper part of the organism.

⁸ Melancholia, for example, can be in excess with respect to the physiological condition of eucrasia (generating excessive structures) or in deficit (generating deficient constructions), but it can also be generated by the combustion of humors by heat (see below); in the latter case, it is always perverse (therefore it is perverse in quality rather than in quantity). In classical humoral medicine these three conditions are usually not so sharply distinguished from each other.

this case we call them *adust humors*). When burned, humors always produce Melancholia. Unani-Tibb medicine provides four types of perverse melancholia produced by the combustion of humors: *malankholia damvi*, produced by the combustion of Blood; *malankholia safravi*, produced by the combustion of Yellow Bile; *malankholia balghami*, produced by the combustion of Phlegm (generally due to fermentation) and *malankholia saudawi*, produced by the combustion of “correct” Melancholia.

Phlegm is cold in the first degree and damp in the second and is a mobile and flowing humor. When coldness becomes excessive, however, the Phlegm can thicken and become viscous (cold indeed makes viscous), producing once again *thickened Phlegm*.

Phlegm itself, when it accumulates and stagnates for any reason (for example due to a lack of heat or an excess of Tension, see below), generates, by “compression”, secondary heat that can condense the humor and make it viscous.

Furthermore, in nature stagnant dampness favors fermentation and putrefactive processes, especially when there is concomitant heat. Also in the human body an accumulation or stagnation of Phlegm may cause the onset of fermentation or putrefaction (phenomena that today’s medicine generically indicates as *infections*), which are certainly supported by the natural heat of the body and by any secondary heat generated by compression of the Phlegm. Moreover, the fermentation and putrefaction generate further secondary heat⁹. All these phenomena are characterized by the coexistence of perverse dampness and heat, even if, to be more precise, they should be described as due to the presence of pathological dampness associated with a certain degree of perverse heat (it is therefore more correct to think of them as due to “heated” humidity rather than moist heat). From a clinical point of view, the disorders characterized by this humoral picture include the phenomena known as *putrefaction*¹⁰ which are manifested by the emission or collection of purulent material, often even hardened (e.g., abscesses)¹¹.

The conditions described so far (thickened phlegm, adust humors, putrefaction) are perverse not due to an incorrect quantity of the humors, but because of their “bad” quality.

Tension

In this text, for the exclusive purpose of simplifying any comparisons between different systems of medicine (for example, Chinese and humoral), we add the pseudo-humor *Tension*¹², which is responsible for the “functionality” of the whole body or its parts (e.g., the organs). In this sense, it corresponds to the *Qi* of Chinese medicine but also to other concepts, such as that of the *Four Virtues* (attractive, retentive, alterative and expulsive) of organs according to Galen (see for example [Giannelli]) and it can also be related to the *vasoconstriction* and *vasorelaxation* conditions of Physiomedicalism and to Matthew Wood’s *Constriction* and *Relaxation* tissue states [Wood].

Tension, defined as a *pseudo*-humor because it is not contemplated by the classical humoral theory, can be thought of as formally derived from Fire to which a sort of “constraint”,

9 The fermentation and putrefaction processes are generally exothermic or generate a “hot” response from the human body..

10 Corresponding to the *toxic heat* of Chinese medicine. This condition also includes diseases characterized by macular or maculopapular eruptions (e.g., exanthematous diseases).

11 The conditions known as *Dampness/Heat* in Chinese medicine (which include, for example, problems often related to the urinary tract or gallbladder, some cases of jaundice, etc.) also fall within this picture.

12 Name borrowed from Matthew Wood’s tissue states model [Wood].

“limitation”, or “obstacle” has been applied. Like Fire, in fact, it is a form of “energy”, mobile in itself and activating; but whereas Fire tends to move only upwards and centrifugally, thus expanding indefinitely, the movement of Tension is more “structured” and so to speak “oriented” towards specific, defined forms and modalities. We can therefore see it as a kind of Fire to which a structuration (element of “terrestrial” nature) has been applied.

We can resort to an image taken from everyday life as an example. If we pour water on the fire, the latter goes out and the water disperses or evaporates. If we place a hard (i.e., cold and dry) element above the fire (for example, a terracotta or metal container) which prevents the water to directly “mix” with the fire, we are able to let the water heat up without dispersing, and to use it warm for specific purposes (for example, to cook food). By applying a cold and dry “obstacle” (the container) to the fire, we “functionalize” the heat that otherwise would disperse or make the water disperse or evaporate.

Tension can therefore be described, in a humoral sense, as derived from a sort of “functionalization” of Fire by a factor (a principle rather than a material cause) of a cold and dry nature. For this reason Tension is hot and dry, with a lower degree of heat than Fire (because of the cooling due to functionalization).

Even Tension can be correct or perverse and, in the latter case, it can be perverse both in quantity (excess or deficit of Tension) and in quality (think for example of the *Qi ni*, or *counterflow Qi*, of Chinese medicine). Given the correspondence, described above, of Tension with Qi, the various manifestations of perverse Tension will typically have a more or less specific correspondence in Chinese medicine (for example, “Tension deficiency” corresponds to “Qi deficiency”). In general, Tension imbalances correspond to Qi imbalances and/or to “Wind” (intended as a pathogenic manifestation).

An imbalance in Tension can also affect other humors, potentially making them perverse. For example, an excess or a stasis (stagnation) of Tension can prevent the body fluids from being moved correctly, generating stagnation of Phlegm and/or Blood; Tension stagnation can generate “compression” which in turn can produce heat (Chinese medicine speaks, for example, of “implosion of stagnant Qi” which generates Fire, understood here not as the element but as a specific manifestation of heat).

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