



## DIPSACUS L. – GENUS

**Order:** Caprifoliaceae Juss. (APG IV, POWO) / Dipsacales Juss. ex Bercht. & J.Presl (Cronquist, Acta/Dryades)

**Family:** *Dipsacaceae* Juss.

**Tribe:** Dipsaceae

The *Dipsacus* L. (1753) genus is native to Europe, Asia and parts of Africa but it is now naturalized also in North and South America, Tasmania and New Zealand. All *Dipsacus* species are tall herbaceous biennial (rarely short-lived perennial) plants growing up to 1–2.5 meters.

As of October 2025, POWO recognizes 21 species and one hybrid in this genus, namely: *Dipsacus asper* Wall. ex DC. (= *Dipsacus asperoides* C.Y.Cheng & T.M.Ai), *Dipsacus atratus* Hook.f. & Thomson ex C.B.Clarke, *Dipsacus atropurpureus* C.Y.Cheng & Z.T.Yin, *Dipsacus azureus* Schrenk ex Fisch. & C.A.Mey., *Dipsacus cephalarioides* V.A.Matthews & Kupicha, *Dipsacus chinensis* Batalin, *Dipsacus comosus* Hoffmanns. & Link, *Dipsacus ferox* Loisel. *Dipsacus fullonum* L., *Dipsacus gmelinii* M.Bieb., *Dipsacus inermis* Wall., *Dipsacus japonicus* Miq., *Dipsacus laciniatus* L., *Dipsacus leschenaultii* Coult. ex DC., *Dipsacus narcisseanus* Lawalrée, *Dipsacus pilosus* L., *Dipsacus pinnatifidus* Steud. ex A.Rich., *Dipsacus* × *pseudosylvestris* Schur (= *D. fullonum* × *D. laciniatus*), *Dipsacus sativus* (L.) Honck., *Dipsacus strigosus* Willd., *Dipsacus valsecchii* Camarda (also spelled *Dipsacus valsecchiaie* Camarda, endemic of Sardinia), *Dipsacus walkeri* Arn. [POWO]

There is currently some dispute about the classification of the *Dipsacus* genus and some of the species belonging to it.

The *Dipsacus* genus is currently assigned to the *Caprifoliaceae* Juss. family by APG IV and Plant of the World Online (POWO), while the Italian reference websites, Dryades and Acta Plantarum still assign the genus to *Dipsacales* Juss. ex Bercht. & J.Presl (as Cronquist did). [Acta, Dryades, POWO]

Moreover, there is an open debate about whether the closely related *Dipsacus sativus* (L.) Honck. and *Dipsacus fullonum* L. have to be considered as two distinct species or two subspecies of a single species. In any case, *D. sativus* (L.) Honck. is a *cultigen* [POWO] and therefore it is only found as a cultivated or escaped plant.

A certain degree of confusion has arisen over time regarding the names to assign to these two plants. Indeed, in some old texts *Dipsacus sativus* (L.) Honck. has even been called *Dipsacus fullonum*, since it is the species which was used by *fullers* (cloth-workers, see below and also [Grieve]).

At present, while POWO classifies them as two distinct species (see above), the Italian authors consider them two subspecies, *Dipsacus fullonum* subsp. *sativus* (L.) Thell. and *Dipsacus fullonum* subsp. *fullonum* Bartolucci & Galasso [Acta, Bartolucci, Dryades, POWO].

In this paper, the POWO naming convention are followed, just for a matter of clarity. Therefore if the authors are not specified in a name, POWO convention is to be assumed.

*D. fullonum* L. has also been assigned the following names (among others; see [Acta, Dryades, James, POWO, Redwood]) over time:

- *Dipsacus fullonum* subsp. *fullonum* Bartolucci & Galasso
- *Dipsacus fullonum* subsp. *sylvestris* Ehrh.
- *Dipsacus fullonum* subsp. *sylvestris* (Huds.) P.Fourn.
- *Dipsacus fullonum* var. *sylvestris* (Huds.) Huds.
- *Dipsacus fullonum*  $\alpha$  *silvester* Huds.
- *Dipsacus silvester* A.Kern.
- *Dipsacus sylvestris* Huds.
- *Dipsacus sylvestris* (Mill.)
- ancient names: *virga Pastoris major* C. Bauh., *labrum Veneris*

*D. sativus* (L.) Honck. has also been named (see [Acta, Dryades, James, POWO, Redwood]):

- *Dipsacus fullonum* (Mill.)
- *Dipsacus fullonum* var. *sativus* L.
- *Dipsacus fullonum* subsp. *sativus* (L.) Thell.
- *Dipsacus sylvestris* subsp. *fullonum* Bonnier & Layens
- *Dipsacus fullonum*  $\beta$  *sativus* L.
- ancient names: *Carduus fullonum*.

## DIPSACUS SPP.



<i>Primary functionality:</i>	Venus
<i>Secondary functionality:</i>	Saturn
<i>Nature:</i>	Dry in the second degree, slightly warm TCM: slightly warm. Enters the Liver and Kidney channel
<i>Taste:</i>	Acrid-bitter, sweet and slightly astringent ( <i>D. fullonum</i> root) TCM: bitter, sweet, and acrid ( <i>D. asper</i> / <i>D. japonicus</i> root)
<i>Tropism:</i>	Musculoskeletal system (bones, joints, ligaments, muscles), digestive system (mainly liver/gallbladder and stomach), connective tissue, skin, sex organs
<i>Humoral actions</i> <sup>1</sup> :	Eliminate perverted phlegm and bile, as well as toxic heat; supplement tension, especially in stomach and kidneys; supplement phlegm, where deficient, and tonify correct melancholy
<i>Clinical actions:</i>	Alexipharmic, analgesic, anti-bacterial, antibiotic, anti-fungal, anti- infective, anti-inflammatory, astringent, cleansing, depurative, diaphoretic, digestive, diuretic, emocathartic, stimulant,

---

<sup>1</sup> See the "Notes on humors" paragraph.

*Used parts:* stomachic, sudorific, tonic, vulnerary  
Root (less used: leaves, flowering plant)

## Description

While *D. sativus* (L.) Honck. and *D. fullonum* L., native to Europe, have been used mainly to tease (“raise the nap” on) the wool but have little history of use as a herbal medicine, the Asian teasels *D. japonicus* Miq. and *D. asper* Wall. ex DC. (= *D. asperoides* C.Y.Cheng & T.M.Ai) have an old history of medicinal application.

This is also reflected in the amount of published data related to the mentioned species: while the Asian teasels have been thoroughly studied also from the standpoint of composition, little research have been conducted on the European counterparts.

Experiments carried out on *D. asper* and *D. japonicus* have revealed the presence of triterpenoid saponins, iridoids, phenolics, alkaloids, polysaccharides and other molecules, for some of which interesting properties have been demonstrated. In *D. fullonum* iridoids (sweroside, loganin, sylvestrosides I-IV, cantleyoside), phenolics (eg., protocatechuic acid), flavones,  $\beta$ -methylglucoside and few other molecules have been found, but no studies have been carried so far aimed at searching for other therapeutically-important molecules like, for example, saponins, alkaloids or polysaccharides (see, for instance, [Oszmiański, Skała, Zhao]).

## *Dipsacus in Chinese Medicine*

[AmDragon, ChinHerbInfo, Li Wei, Winston]

The roots of both *D. asper* and *D. japonicus* are used in Traditional Chinese Medicine (TCM) more or less interchangeably. They are collectively known as *Xu Duan* (续断) or Radix Dipsaci. *Xu Duan* literally means “restore what is broken”. It is classified as an herb that tonifies the Yang. It is bitter, sweet and acrid, with a slightly warm nature, and enters the Liver and Kidney channels.

*Xu Duan* is used to:

- supplement the Liver and the Kidneys and strengthen the sinews and bones, in case of:
  - Liver and Kidney deficiency with sore and painful lower back and knees, stiffness in the joints and weakness in the legs
  - urinary dribbling or polyuria from Kidney deficiency
  - impotence
  - spermatorrhea
  - deficient hypertension
- stop uterine bleeding, quiet the fetus and prevent miscarriage, in case of:
  - uterine bleeding and vaginal discharge (leucorrhea), especially related to *Ren* channel deficiency
  - bleeding during pregnancy
  - restless fetus
  - threatened miscarriage

- promote the movement of Blood, alleviate pain, generate flesh and reconnect the sinews and bones (treat injuries and joints fractures), in case of:
  - knocks and falls, trauma; especially with pain and swelling in the lumbar region and limbs (topical and internal use)
  - external sores (topical use)
  - *Bi* pain
- reduce swellings, abscesses and sores, in case of:
  - toxic abscesses and sores.

*Xu Duan* disseminates and unblocks all channels and excels at connecting the sinews and bones. *Xu Duan* repairs tissues damaged by both trauma or internal degeneration. Moreover, it tonifies without stagnating and is therefore very useful for arthritic conditions due to deficiency.

*Xu Duan* is often used:

- for lower body pain (lumbar region and knees) and lack of strength in the sinews and bones with significant aspects of Liver and Kidney deficiency and Wind-Dampness<sup>2</sup>
- for stoppage of breast milk.

*Xu Duan* can be used alone to treat polyuria and spermatorrhea.

It induces eruption of pus, stops bleeding, promotes tissue regeneration, and exerts an analgesic effect on patients with carbuncle dermatosis.

Dry-fried *Dipsacus Chao Xu Duan* has an increased ability to tonify and moderated acrid and dispersing qualities; this make the herb able to address the *Chong* and *Ren* channels and stabilize them. It is also the best for calming the fetus unless there is bleeding, in which case it should be charred.

Charred *Dipsacus Xu Duan Tan* stops bleeding and quiets the fetus. It is used for bleeding during pregnancy and threatened miscarriage or continuous uterine bleeding.

Salt-prepared *Dipsacus Yan Xu Duan* has an enhanced ability to enter the Kidney channel and fortify the bones. It is often used when Kidney deficiency leads to weakness of the lower back and knees, urinary frequency and leakage of *Jing*.

Wine-fried *Dipsacus Jiu Xu Duan* has a stronger ability to reconnect sinews and bones and regulate blood vessels. It is used to treat traumatic injury, localized swelling, sprains, dislocations and fractures. It is also used for Wind-Cold-Damp *Bi*, and for cramps and spasm in the muscles.

*Xu Duan* is reduced in powder for topical application.

### ***European Dipsacus species in medicine***

*Dipsacus fullonum* L. and *Dipsacus sativus* (L.) Honck.

The best known European teasel species are *D. fullonum* L. and *D. sativus* (L.) Honck.

---

<sup>2</sup> It is much milder than *Eucommia ulmoides* (杜仲, *Du Zhong*, or Cortex *Eucommiae*) at tonifying the Liver and Kidneys. Compared to *Du Zhong*, *Xu Duan* is used more to treat lower back pain with significant aspects of both Wind-Damp and Kidney Deficiency, while *Du Zhong* is more effective when the problem is due primarily to deficiency. [ChinHerbInfo]

*D. sativus* (L.) Honck is a *cultigen* and therefore it cannot be found in the wild. It was once cultivated for the rigid and recurved apical spine of the flower bracts on the receptacle which are able to tug on the wool fibers so 'raising the nap'. In *D. fullonum* L., instead, the apical spines of the flower bracts are straight and flexible.

The sources which mention the use of European teasles in herbal medicine are few. Indeed, *"the principal use of the Teazle, dating from long before [John] Gerard's time, still remains unchallenged, and that is for wool 'fleecing,' or raising the nap on woollen cloth. The cultivated variety, D. fullonum, Gerard's 'tame Teasel' is used, because, as already mentioned, its spines are crooked, not straight. These heads are fixed on the rim of a wheel, or on a cylinder, which is made to revolve against the surface of the cloth to be 'fleeced,' thus raising the nap. No machine has yet been invented which can compete with the Teazle in its combined rigidity and elasticity. Its great utility is that while raising the nap, it will yet break at any serious obstruction, whereas all metallic substances in such a case would cause the cloth to yield first and tear the material."* [Grieve]

Ancient and Renaissance European authors made no distinction between the healing properties of wild and cultivated teasel (*D. fullonum* and *D. sativus* respectively), and recommended the plants for external use only. In fact, Castore Durante explicitly writes that *"no internal virtue has yet been discovered except that its root, when chewed and swallowed, increases thirst just as liquorice quenches it."* [Durante]

According to Dioscorides, *"the root, cooked in wine and then crushed until it resembles wax, heals cracks in the anus, and fistulas. This medicine should be kept in a copper vessel. It is said to cure warts [...]."* (see [Durante, Mattioli])

Castore Durante also adds that *"The leaves applied to the forehead are effective against frenzy. The juice of the leaves put in the ears kills the worms therein. The water distilled from the leaves is beneficial for mouth ulcers."* [Durante]

In the 1789 edition of Culpeper's herbal, a single prescription for internal use can be read: *"Boiled in wine, it purgeth by urine."* [Culpeper-1789]

Among modern authors, some of them distinguish between the properties of the wild and cultivated teasel. For instance, according to Theophilus Redwood (1806 – 1892), the roots of *D. sativus* (which the author calls *D. fullonum*) are *"bitter and tonic"*, while those of *D. fullonum* (called *D. sylvestris* by the author) are *"antiscrofulous, and in wine, diuretic."* [Redwood]

The Italian herbalist Luigi Palma describes *D. fullonum* (called *D. sylvestris* by the author) as diaphoretic, diuretic, and emocathartic<sup>3</sup> and recommends it in case of sebaceous acne, desquamative dermatosis, impetiginous eczema, folliculitis, urticaria, psoriasis, seborrhea (internal use), while considers *D. sativus* (which the author calls *D. fullonum*) only diaphoretic and diuretic, useful in case of ascites, eczema, hyperazotemia, oliguria, inflammatory conditions of the urinary tract, urticaria. [Palma]

Most modern authors, however, regard *D. fullonum* and *D. sativus* as equivalent from the therapeutic point of view (see, for instance, [Culpeper, Hill, James, Grieve]<sup>4</sup>). Moreover, some of these authors deem the European species as having the same properties as the Asian counterparts. Matthew Wood, for instance, in his foreword to Wolf D. Storl's book *"Healing Lyme disease naturally"*, reports that, according to the renowned American herbalist and acupuncturist

---

<sup>3</sup> Blood purifier.

<sup>4</sup> Renaissance authors, like Mattioli and Durante, clearly speaks of the two species without mentioning any difference between them from the therapeutic point of view.

William LeSassier, Western teasel (*D. fullonum* L.) has the same properties as Asian teasel, and “it is for severe wounds to the muscles, bones, and joints [...], like a triple-whammy arnica.” [Storl]

Robin Murphy, too, writes that “internally, teasel [*D. fullonum*] root treats pain and weakness in the knees and lower back, helps repair damaged tissues such as bones and ligaments, and can help stop uterine bleeding during pregnancy” ([Murphy]), actions which are typical of Xu Duan. And also, “it is an analgesic for pain relief, and anti-inflammatory, and a stimulant for the nervous system. Teasel is effective for chronic inflammation of the muscles, one of the major symptoms caused by spirochetes associated with Lyme disease.” [Murphy]

Still according to Murphy, “teasel acts as an anti-inflammatory, reducing stagnation and pain associated with arthritic pain and bursitis. Sore knees, stiffness in the joint, weak legs. Arthritic pain from traumatic injuries, and rheumatism.[...] Teasel root has been very effective for chronic inflammation and pains of the muscles, one of the major symptoms of fibromyalgia.

[...] this herb is effective in treating diarrhea. Teasel also assists in improving appetite, nurturing the stomach as well as healing the liver.” [Murphy]

According to Wolf D. Storl, “the bitter tasting root stimulates digestion, is diuretic and sudorific, and in this way, it cleanses the whole body. The plant also helps with gout, arthritis, rheumatism, dropsy and obesity. Furthermore it is useful for skin diseases like dermatitis, furunculosis, acne etc., which are the result of problems with digestion.” [Storl]

According to Melanie Reinhold, teasel root possesses a high energetic potential that has a positive effect on vitality. Furthermore, it is able to significantly stimulate an organism’s immune system, thus activating and, above all, stabilizing its own immune defenses. [Reinhold]

According to Jean-Claude Leunis, “teasel is a plant found in alder-poplar groves and ruderal elm groves. Its tropism is digestive and infective. It is slightly hypoglycemic. Its profile is exudative on an anergic terrain with a tendency to amyloidosis. Its main therapeutic complements are *Arctium lappa* and *Lapsana communis*. With *Arctium lappa*, it shares a pancreatic tropism, but its biological profile is markedly more anergic than that of burdock. It is the plant of furunculosis or infected foci whose evolution is latent, such as abscesses that correspond to metafunctional fixations.” [DewitLeunis]

In summary, teasel supports the health of the musculoskeletal system (bones, muscles, ligaments, and tendons) and connective tissue and repairs them when damaged. It also sustains the digestive system and stimulates the body’s detoxification pathways, proving useful also for the treatment of skin conditions that strongly depend on the proper functioning of the digestive organs.

*Dipsacus* species have also a great affinity for the immune system and reinforces one’s inner vitality. Furthermore, from a psycho-emotional perspective, teasel strengthens the personal energetic boundary and provides support in all those cases in which one feels emotionally exhausted, depleted or vulnerable.

Usually the root is used in herbal medicine, while the leaves are used rarely. Anyhow, also the leaves have their own medicinal effects. According to Wolf D. Storl, “one can also use the leaves, which have the same effect [as the root]” ([Storl]). Modern research, too, has discovered interesting properties of leaves (for instance, cytotoxic effects on some cancer cell lines [Kuhntinskaja], anti-*Borrelia burgdoferi* activity [Saar-Reismaa], alpha-amylase inhibition activity [Witkowska-Banaszczak]).

The leaves of *D. fullonum* are perfectly edible, though quite bitter. When using them for food, it is important to pay attention to the spines present on both sides of the leaf blade.

In Corsica, the plant is consumed in soup, jam-based fillings, and cakes. In Villacidro (Sardinia), the stem of the plant, stripped of its spiny epidermis, is eaten. [Atzei]

The cauline leaves are opposite and welded at the base (*connate*), forming a basin where the dew and rain water collects. This basin has been called *labrum Veneris*<sup>5</sup> or *Venus bath* (or *Venus basin*). The water that pools in the leaf bases tends to trap insects and their decomposing bodies have been found to stimulate seed production, therefore *D. fullonum* L. is considered a semi-carnivorous plant. [Shaw]

The water that collects in the Venus basin is regarded as having some properties and mainly used externally. According to Galen, "*The water contained in the leaves is beneficial for freckles and red eyes. It also removes blemishes from the face.*" (see [Durante]).

Similarly Culpeper, who affirms that "*the water also, that is received in the hollowness of the Leaves, is good for the ailments for which the distilled water is recommended.*" [Culpeper-1789], that is, it "*taketh away redness and mists in [the eyes] that hinder the sight, and is often used by women to preserve their beauty, and to take away redness and inflammations, and all other discolourings.*" [Culpeper]

In Sardinia, the dew water that accumulates overnight in the Venus basin is collected in the morning and used for various disorders of the skin or sensory organs: to prevent serpigo, for eczema, for red or mucus-filled eyes, and for red spots on the skin. A leaf decoction has been used as a wash for mange. [Atzei]

The ashes of *D. fullonum* have been found to contain abt. 6% silica. [Wehmer]

### *Dipsacus ferox* Loisel

Also *Dipsacus ferox* Loisel., an Italian and Corsican endemism, has similar uses to *D. fullonum*. In Sardinia, the water in the Venus basin is collected (either on March, 1<sup>st</sup> or April, 1<sup>st</sup>) and used as a tonic-eudermic for the skin (in particular to make it smooth), as well as to avoid the tanning of the month of March, washes are made with dew water. [Atzei]

Internally, the composite syrup of *D. ferox* leaves, pennyroyal, and honey is drunk against coughs, while the decoction of the aerial parts of *D. ferox* is used against constipation and as an analgesic for gastralgia in women giving birth. [Atzei]

Externally, the decoction of the root is used as a wash for acne, skin conditions in general, and eczema. To treat eczema, also the dew water collected from between the bracts of the inflorescence on April 1<sup>st</sup> is used as a wash. The leaf decoction is used to treat scabies. [Atzei]

In Sardinia the plant was used for fumigation against fear, illnesses and misfortunes believed to be caused by the evil eye. [Atzei]

---

<sup>5</sup> Shorthand for "*lavabrum Veneris*", that is, "*Venus bath*".



## Properties

### *Temperature and taste*

Teasel root taste is classified as bitter, sweet, and acrid in TCM. [AmDragon, Li Wei]

Some contemporary author deem it simply bitter (for example, see [Wood]).

In fact, the actual taste of teasel root is quite complex, being strongly acrid-bitter<sup>6</sup>, sweet to a lesser degree and only slightly astringent.

Within Hippocratic-Galenic medicine, Teasel root is considered dry in the second degree (see [Durante, Culpeper, Mattioli]). According to Galen, *“teasell root is dry in the second degree , & it has something abstersive”* (see [Durante, Mattioli]).

Culpeper affirms that it is also cold: *“Galen saith, they are dry in the second degree: and I take it all Authors hold them to be cold and dry”* ([Culpeper-1816]), while Hildegard von Bingen deems it hot ([Bingen]).

According to TCM, the root is slightly warm. [AmDragon, Li Wei]

TCM and Hippocratic-Galenic medicine consider the temperature of plants differently (several herbs are considered cold in one system and hot in the other, and vice versa), therefore the data coming from the two systems of medicine are not easily comparable.

In any case, even from a Hippocratic-Galenic perspective, teasel root cannot be considered cold: a tonic herb that stimulates so many processes in the body must necessarily be hot to some (maybe low) degree. Even the flavor can only be that of a plant with a certain degree of hotness.

### *Signature*

Different authors have assigned different signatures to teasel (as it often happens). Culpeper tells *“it is an herb of Venus”* ([Culpeper]), while according to Robin Murphy the plant belongs to Mars and Moon. Wolf D. Storl assigns a Martian signature to the plant *“because of the martial barbs and the red<sup>7</sup> color of the blossoming ring”*, but also adds that *“as Nicolas Culpeper, herbal healer and astrologer, also wrote, Venus and her cleansing properties are especially active in the plant.”* ([Storl])

Storl also adds that *“the signature of the water-gathering basin is very feminine and lovely, a Venus characteristic. The power of Venus bestows beauty, youth, and purity. The Venus characteristics also dampen the fiery wrath of Mars, moderating and alleviating infections and inflammations.”* [Storl]

As difficult as it may be to “speculate” about signatures and give a rational explanation of them, we can try to make some reasoning on this issue.

While it is honestly hard to find any Moon signature in teasel, such an abundance of spines on a plant can be easily seen as a Martian feature. Anyhow, no really Martian functions (nor physical signs, except the spines) can be found in teasel.

Indeed, all teasels are prominently Venusian as suggested by Culpeper. If we need to make sense of the spines that cover the whole plant, we can surely associate them, without fear of making mistakes, with the war-like aspect of Venus (a less known – but fundamental – facet of this

---

<sup>6</sup> A stimulating, intense bitter taste that makes the mouth pucker and sends shivers down the spine.

<sup>7</sup> A light pink, indeed.

archetype, personified by some minor divine “characters” like, for instance, *Ἀφροδίτη Ἀρεία*, *Aphrodite Areia*) rather than with Mars.

The pink flowers, the Venus’ basin, the plant’s particular ability to collect water (as kidneys and bladder do) can be seen as “external” signs of the Venusian archetype. The medicinal properties are also typically Venusian: the plant, in fact, is able to both nurture and heal the body, on the one hand, and detoxify and moderate inflammation, on the other.

Maybe teasels “intermingles” some Saturnian aspects with the more prominent Venusian ones. Both the aspect of the plant and its “functions” in medicine recalls the idea of Saturn. Indeed, the plant is tall and “majestic”, and reaches upward with its flowering stalk, towering most of the other herbaceous plants. The entire plant is stiff and hard, even at the flower head, and when it dries out its rigid, blackish-gray remains (which easily reminds bones) seem to emanate a kind of spiritual impression of otherworldliness.

Even its flowers have a peculiar behaviour. Flowering begins at the equator of the ovoid-cylindrical receptacle, and then continues towards the two opposite poles of the ovoid while the older flowers die off leaving behind empty scarious bracts. This way, the flowers form rings of flowers that seem to “move” along the receptacle axis. The overall figure cannot but recall Saturn’s globe with its well known rings.

Also the ability of the plant to consolidate fractures and close wounds, to harden and “reinforce” the bones, the spine, tendons, ligaments and joints is typically Saturnian.

### ***Tissue Phases***

2 (reaction), 3 (deposition), 6 (disorganization). [Dewit-Leunis]

## **Actions and indications**

Since the European major teasels, *D. fullonum* and *D. sativus*, are mostly considered superimposable in their effects, and since some authors deem the European species as having the same properties as the Asian counterparts (eg., William Lesassier, Matthew Wood, Robin Murphy, see the paragraph “*European Dipsacus species in medicine*” above), in this chapter all the treated *Dipsacus* species are dealt with as having the same properties. Anyhow, for the sake of clarity, the actions and indications more specifically pertinent to *D. asper*/*D. japonicus* are marked with “(Xu Duan)”.

### ***Humoral actions***

Teasel eliminates perverted phlegm and bile, as well as toxic heat. It supplements tension, especially in stomach and kidneys. It also supplements phlegm, where deficient, and tonifies correct melancholy.

### ***Tropism***

Musculoskeletal system (bones, joints, ligaments, muscles), digestive system (mainly liver/gallbladder and stomach), connective tissue, skin, sex organs.

## ***Clinical actions***

Alexipharmic [Bingen]:

- Lit.: *"A person who has eaten or drunk poison should pulverize the top, root, and leaves of thistle. He should consume this powder either in food or drink, and it will expel the poison."* [Bingen]

Analgesic. [Murphy]

Anti-infective [James, Murphy]:

- anti-bacterial, antibiotic. [Murphy]
- anti-fungal. [Murphy]

Anti-inflammatory. [Murphy]

Astringent. [Murphy]

Cleansing, depurative [Duraffourd-Lapraz, Grieve, Guarino, Murphy, Storl]:

- Lit.: *"Teasel facilitates in cleansing the system and helping it to get rid of toxins, in addition to improving digestion."* [Murphy]
- Lit.: *"It is a purifier. Its root is rich in metal oxides and metalloids. It is mainly used as a decoction: 10 g per liter (boil for 10 minutes, drink throughout the day)."* [Duraffourd-Lapraz]
- Lit.: *"The bitter-tasting root was used to stimulate perspiration and diuresis, and consequently favor the elimination of waste matter."* [Guarino]

Diaphoretic, sudorific. [Guarino, Murphy, Palma, Storl]

Digestive [Storl], stomachic. [Grieve, Hill, Murphy, Wood]

- Lit.: *"The root is used ; it is bitter, and given in infusion, strengthens the stomach and creates an appetite."* [Hill]
- Lit.: *"Internally, the plant is used as a stomachic-digestive: [...] infusion of dried root, [...] decoction of leaf and root [or ...] infusion of dried root [...]."* [Atzei]

Diuretic [Culpeper-1789, Guarino, James, Palma, Murphy, Storl]:

- azoturic diuretic. [Palma]
- Lit.: *"when boiled in Wine they purge by Urine as effectually as Asparagus."* [James]
- Lit.: *"Boiled in wine, it purgeth by urine."* [Culpeper-1789]
- Lit.: *"Italian folk medicine knows of a decoction to increase urination and for cleansing the organism: 0.07 ounces of root substance (or leaves) in one pint of water is brought to a boil. Drink one small cup in the morning on an empty stomach."* [Storl]

Emocathartic. [Palma]

Stimulant (nervous system). [Murphy]

Tonic [AmDragon, ChinHerbInfo, DewitLeunis, Li Wei, PorterSmith, Reinhold, Winston]:

- for anergic conditions. [DewitLeunis, Reinhold]
- Kidney Yang tonic (TCM – *Xu Duan*) [AmDragon, ChinHerbInfo, Li Wei, Winston]

- Lit.: *“It is considered to be tonic in exhausting diseases, wounds, tumors, fractures, and ruptured tendons (as its names indicate), suppression of the secretion of milk, dysmenorrhoea, hemorrhage [...].”* (Xu Duan) [PorterSmith]

Vulnerary. [AmDragon, ChinHerbInfo, Li Wei, McDonald, Murphy, PorterSmith, Storl, Wood]

## ***Specific indications***

### *Characteristic features/symptoms, constitution*

Large, bulky people who, when they throw out a joint, tend to really damage the tissues, due to the weight and momentum applied to the joint. [Wood]

### *Mind*

*“People who had a use, but lost it.”* (William Lesassier, in [Wood])

People which are depleted, emotionally-exhausted due to loss of energy caused by any emotional condition, bad relationship, harsh environment, long term illness, parasitic or specifically tick-borne infection (flower essence). [DeltaGardens, EarthAshram, FreedFlrsCom, FreedFlrsUK, GreenHope, PrimRoseAp, WildWisWool]

### *General*

*Trauma, injuries* [Murphy, Storl, Wood]:

- especially with pain and swelling in the lumbar region and limbs (topical and internal use – Xu Duan) [AmDragon]

*Fatigue.* [Murphy]

Ascites, dropsy. [Palma, Storl]

Hyperazotemia. [Palma]

Obesity. [Storl]

Cancer [Kuhntinskaja, Murphy, PorterSmith]:

- Cancer of the breast. [PorterSmith]
- Lit.: *“This herb has a traditional history of being used in treating cancer.”* [Murphy]

### *Immune system*

*Infections* [James, Murphy, Storl, Wood]:

- *Bacterial, fungal, yeast.* [Murphy]
- *Lyme Disease* (tea made with the root or leaves, root powder, fresh root tincture, water in the Venus basin). [Murphy, Saar-Reismaa, Storl, Wood]

- Lit.: *"it is a specific for Lyme disease; unfortunately, it only works in some cases."* [Wood]

- Influenza. [Murphy]
- Herpes, shingles. [Murphy]
- Scrofula. [James]

Fevers. [Murphy]

## Head

(see also *Skin*)

Freckles, discoloring of face (root tincture, Venus basin water, distilled water of the leaves). [Culpeper, Hill, Storl, Wood]

Frostbite on the lips (tincture). [Storl]

Excessive wrinkles on the face. [Wood]

## Ears

Worms (leaf juice) [Culpeper, Durante]:

- Lit.: *"The juice of the leaves dropped into the ears, kills worms in them."* [Culpeper]

## Eyes

Redness, ocular inflammation, blurred vision<sup>8</sup> [Culpeper, Murphy, Wood]:

- Lit.: *"The distilled water of the leaves dropped into the eyes, taketh away redness and mists in them that hinder the sight [...]."* [Culpeper]

## Respiratory system

Tuberculosis [Guarino, James, Storl]:

- Lit.: *"The Root bruised and mixed with Honey, has been found of extraordinary Virtue in Consumptions, which have been regarded as desperate."* [James]
- Lit.: *"The plant decoction is rich in silica, and therefore it was used – though quite rarely – for the treatment of tuberculosis."* [Guarino]

## Cardiovascular system

Hypertension (from Kidney Yang deficiency – *Xu Duan*). [Winston]

---

<sup>8</sup> Orig.: *"mists [in the eyes]"*: this expression can refer to any condition that produces blurred vision.

## *Digestive system*

*Stomach problems* [Grieve, Hill, Murphy, Wood]:

- *Poor appetite* [Grieve, Hill, Wood]:
  - Lit.: *"The root is used ; it is bitter, and given in infusion, strengthens the stomach and creates an appetite."* [Hill]
  - Lit.: *"Teasel also assists in improving appetite, nurturing the stomach as well as healing the liver."* [Murphy]
  - Lit.: *"Many practitioners of herbal medicine, recommend the preparation of a tea from teasel roots that is considered to be an excellent appetite stimulant."* [Murphy]
- *Indigestion.* [Murphy]

*Anal ulcerations and fistulas* [Culpeper, Durante, Mattioli, Murphy, Storl]:

- Lit.: *"Dioscorides saith, that the root bruised and boiled in wine until it be thick, and kept in a brazen vessel or pot, and after spread as a salve and applied to the fundament, doth heal the clefts thereof, cankers and fistulas therein, [...]."* [Culpeper]

Diarrhea. [Murphy]

Hemorrhoids. [PorterSmith, Storl]

Parasites in intestine. [Wood]

## *Liver and gallbladder*

*Liver disorders* [Grieve, Hill, Murphy, Storl, Wood], *gallbladder ailments.* [Murphy, Storl]:

- *Hepatitis.* [Storl]
- *Jaundice* [Grieve, Hill, Murphy, Wood], *cholestasis* [Grieve, Hill, Wood]:
  - Lit.: *"[The root] is also good against obstructions of the liver, and the jaundice"* [Hill]
- Lit.: *"An infusion prepared from teasel is believed to get rid of impediments of the liver as well as cure jaundice. This herb is also beneficial in curing jaundice, in addition to the problems related to the gallbladder."* [Murphy]

## *Kidneys and urinary system*

*Kidney disorders* [Culpeper-1789, James, Murphy, Storl]:

- as a diuretic [Culpeper-1789, James, Storl], as an azoturic [Palma].
- Oliguria, inflammatory conditions of the urinary tract. [Palma]
- Urinary dribbling or frequent urination (from Kidney deficiency – *Xu Duan*) [AmDragon, ChinHerbInfo, Li Wei]
- Incontinence of urine (*Xu Duan*). [PorterSmith]

## *Musculoskeletal system*

### *Bone fractures [Murphy, Storl, Wood]:*

- Lit.: *"It is for severe wounds to the muscles, bones, and joints," he said. 'You mean like arnica?' I asked. 'No, more like a triple-whammy arnica. The joint isn't just stretched, it is torn. The bone is not just bruised, it's broken.'"* (Matthew Wood in [Storl])

### *Torn joints and ligaments, torn connective tissue [Mcdonald, Murphy, Wood], joint pains [Murphy]:*

- Lit.: *"catastrophic injuries of the joints and tendons"* [Wood]
- Lit.: *"Teasel is an important remedy for conditions where the muscles are torn, badly injured, or inflamed. Especially where the large joints (shoulders, hips) are torn and damaged. Where people have lost the ability to function – 'had a use, but lost it,' as William Lesassier emphasized."* [Wood]
- Lit.: *"Teasel (Dipsacus sylvestris) root has been used to treat torn connective tissues, and may be among the best remedies for torn muscles. It possesses an anti-inflammatory action on virtually all joint tissues"* [Mcdonald, Murphy]

### *Torn muscle, muscle pain, sore muscle, chronic inflammation of the muscles [Murphy]:*

- *Complete or partial debility from inflammation and breakdown of the joints and muscles.* [Wood]
- Lit.: *"Teasel is effective for chronic inflammation of the muscles, one of the major symptoms caused by spirochetes associated with Lyme disease."* [Murphy]
- Lit.: *"Applying Teasel topically helps sore muscles after intense physical exercise, muscle sprains and spasms plus back, shoulder and neck pains."* [Murphy]

### *Fibromyalgia [Murphy]:*

- Lit.: *"Teasel root has been very effective for chronic inflammation and pains of the muscles, one of the major symptoms of fibromyalgia."* [Murphy]

### *Sore and painful lower back and knees, stiffness in the joints and weakness in the legs (due to Liver and Kidney deficiency – Xu Duan). [AmDragon, ChinHerbInfo, Li Wei, Murphy]*

### *Arthritis [Murphy, Storl], arthritic pain from traumatic injuries [Murphy]:*

- Lit.: *"Teasel acts as an anti-inflammatory, reducing stagnation and pain associated with arthritic pain and bursitis sore knees, stiffness in the joints, weak legs, arthritic pain from traumatic injuries, and rheumatism."* [Murphy]

### *Rheumatism [Murphy, Storl], Bi pain [AmDragon, ChinHerbInfo, Li Wei].*

### *Bursitis. [Murphy]*

### *Sciatica. [ChinHerbInfo]*

### *Gout. [Storl]*

### *Osteoporosis (Xu Duan). [Murphy, Storl]*

### *Narrowing of the vertebral discs (spinal stenosis) [Mcdonald, Murphy]:*

- Lit.: *"Teasel is useful in treating narrowing of the vertebral discs."* [Mcdonald, Murphy]

## Reproductive system

### FEMALE

Uterine bleeding, leucorrhea (especially related to *Ren* channel deficiency – *Xu Duan*) [AmDragon, ChinHerbInfo, Li Wei, Murphy]:

- Uterine bleeding during pregnancy (*Xu Duan*). [AmDragon, ChinHerbInfo, Li Wei, Murphy]
- Lit.: *“Teasel root is known for helping stop the uterine bleeding. In this instance, Teasel root can be taken during menstrual flows or even between the menses cycle. Sometimes during pregnancy, uterine bleeding can occur and teasel root has been taken during this time with good results.”* [Murphy]

Restless fetus (*Xu Duan*). [AmDragon, ChinHerbInfo, Li Wei, Murphy]

Threatening miscarriage (*Xu Duan*) [AmDragon, ChinHerbInfo, Li Wei, Murphy, PorterSmith, Wood]:

- Lit.: *“[Teasel] will also help with threatened miscarriage by stopping uterine bleeding and calming a restless fetus.”* [Murphy]

Ante- and post-partum difficulties of every kind (*Xu Duan*). [PorterSmith]

Postpartum: restorative for women who have had a Cesarean. [Wood]

Stoppage of breast milk (*Xu Duan*). [Li Wei]

### MALE

Impotence (from Kidney Yang deficiency – *Xu Duan*). [Winston]

Spermatorrhea (from Kidney Yang deficiency – *Xu Duan*). [AmDragon, ChinHerbInfo, Li Wei]

## Skin

*Skin ailments* [AmDragon, Bingen, ChinHerbInfo, Culpeper, Guarino, Li Wei, Murphy, Storl]:

- Skin redness [Culpeper] and inflammation [Culpeper, Scholten]; dermatitis, eczema [Palma, Storl], psoriasis [Palma, Wood], desquamative dermatosis, folliculitis, urticaria [Palma], rash [Bingen]:
  - Lit.: *“If someone has a rash on his body, he should mix this powder [the pulverized top, root, and leaves of teasel] with fresh fat and anoint himself with it, and he will be healed.”* [Bingen]
- Acne [Guarino, Murphy, Storl, Wood], sebaceous acne [Palma], furunculosis [DewitLeunis, Storl], abscess [AmDragon, ChinHerbInfo, DewitLeunis, Li Wei Murphy], impetigo [Wood], impetiginous eczema, seborrhea [Palma]:
  - Lit.: *“An infusion prepared from the leaves of teasel has been employed in the form of a wash to cure acne. A facial wash for acne can be made from the water collected in the cup formed by the leaves.”* [Murphy]
- especially when caused from dysfunctions in the digestive tract [Storl]:



- Lit.: *“Furthermore, it has been traditionally used for skin ailments like dermatitis, furunculosis, acne, and similar problems, especially when these come from dysfunctions in the digestive tract. Externally it was used for fistulas, eczema, warts, and scabs.”* [Storl]
- Discoloring (face) [Culpeper]:
  - Lit.: *“The distilled water of the leaves [...] is often used by women to preserve their beauty, and to take away redness and inflammations, and all other discolourings.”* [Culpeper]
- Warts [Culpeper, Durante, Grieve, Murphy, Storl], wens<sup>9</sup> [Culpeper, Grieve], cankers [Culpeper, Grieve]:
  - Lit.: *“Dioscorides saith, that the root bruised and boiled in wine until it be thick, and kept in a brazen vessel or pot, [...] also taketh away warts and wens.”* [Culpeper]
- Cysts. [Murphy]
- Sores. [AmDragon, ChinHerbInfo, Li Wei, Murphy]
- Whitlow<sup>10</sup>. [Murphy]
- Carbuncle. [ChinHerbInfo]

Wounds. [Murphy, Storl]

Reduces scars. [Wood]

## Parts used and their collection

The root is the part most used in herbal medicine, and this holds for almost any *Dipsacus* species in whichever herbal tradition. In TCM only the roots of *Xu Duan* are used.

Anyhow, all the parts of the plants have a medicinal value, therefore also leaves and flower heads. Some authors specifically mention the use of leaves (see the “*Actions and indications*” paragraph for details).

*Dipsacus* plants are biennial. The root is harvested in the first year in late fall, winter, or the following early spring, before the stalks shoot upward. Once the plant blossoms, the roots become woody and have no longer any medicinal value. [Storl, Wood]

## Preparation and dosage

The various *Dipsacus* species are generally used to make decoctions or tinctures. Seldom infusions are suggested.

For TCM decoctions, the dosage of *Xu Duan* varies, according to the different sources, between 6 and 30g. [AmDragon, ChinHerbInfo, Li Wei]

For root tincture, the fresh roots are harvested, washed, and carefully chopped. They must not be peeled, since most of the active ingredients are in the skin. [Storl]

---

<sup>9</sup> A *wen* is an abnormal growth or a cyst protruding from a surface especially of the skin.

<sup>10</sup> An abscess in the soft tissue near a fingernail or toenail.

Dose of tincture: (1)5-15 drops. [McDonald, Wood]

### **Contraindications and collateral effects**

Teasel is likely to produce Herxheimer effects (temporary aggravation of symptoms) in Lyme disease: this is a positive sign, since it is due mainly to the removal of toxins from the tissues where they have been stored, in order to be eliminated from the body. Chronic cases will aggravate after about two or three weeks. Persist in small doses (1-3 drops, 1-3x/day) for six weeks. [Wood]

In TCM, *Xu Duan* is contraindicated in case of Yin deficiency with Excess Fire, Wind-Damp-Heat Bi, in the early stages of dysenteric disorders, and for those with anger related to Qi stagnation. [AmDragon, ChinHerbInfo, Li Wei]

*Xu Duan* antagonizes *Omphalia sclerotium*, *Lei Wan* (雷丸). [AmDragon]

*Xu Duan* is considered safe to use during pregnancy. [ChinHerbInfo]

### **Homeopathy**

*Dipsacus fullonum* (Dips-f) is the only *Dipsacus* species proved so far, but it has received only some minor provings.

The fresh flowering plant is used as a starting material. [AmHomPh]

#### *Mind*

- Dejected, depressive mood [Vermeulen]; sad, misanthropy [Scholten]; in morning on waking, > afternoon [Vermeulen]; < morning, waking [Scholten].
- Nostalgia about past friendships and old things, old buildings. [Scholten, Vermeulen]
- Irritated, from incompetence. [Scholten]
- Alcoholism. [Scholten]
- Discord between desire and attitude. [Scholten]
- Polite, trying to suppress his strong instincts, his intimate life. [Scholten]
- Discord, gap between him and others; separate from his social life. [Scholten]
- Tormented by sexual desires. [Scholten]
- Delusions: eyes, closed eyes, staring eyes, animal eyes, being looked at [Scholten, Vermeulen], looking away [Vermeulen].
- Dreams: Fire; hotels and holidays; journeys; laborious, strenuous, demanding [Scholten, Vermeulen]; colourful. [Vermeulen]
- Colour preference: 6C, 15-16B, 15-16D. [Scholten]

### *General*

- Night sweat [Vermeulen]; sweat: < night [Scholten].
- Infection: Lyme disease; bacteria. [Scholten]
- Colours in pink to purple range – dreams, images. [Vermeulen]

### *Local*

- Eyes: eyes as if swollen, suddenly [Scholten, Vermeulen]; fistule. [Scholten]
- Ears: noise in ears as from water. [Vermeulen]
- Throat: thistly prickles in throat. [Vermeulen]
- Heart: circulation problems. [Scholten]
- Abdomen: problems. [Scholten]
- Rectum: anal fistule. [Scholten]
- Urinary: Involuntary loss of urine [Scholten, Vermeulen]; in early morning in bed [Vermeulen]; worse morning. [Scholten]
- Limbs: pain in right knee, < motion, > sitting. [Scholten, Vermeulen]
- Back: backache. [Scholten]
- Skin: warts, inflammation. [Scholten]

## **Flower essence**

Teasel confers a potent energetic protection to people which are depleted, emotionally-exhausted or vulnerable because of any emotional condition, bad relationship, harsh environment, long term illness, parasitic or specifically tick-borne infection. [DeltaGardens, EarthAshram, FreedFlrsCom, FreedFlrsUK, GreenHope, PrimRoseAp, WildWisWool]

It helps to create strong and clearly defined boundaries, to get rid of any parasitic energy, to balance the chakras and to keep the personal energy field clear of anything but one's own energy, replenishing energy on all levels (physical, mental, emotional, and spiritual) and guiding toward rhythms, work, places and relationships that replenish rather than exhaust. [DeltaGardens, EarthAshram, FreedFlrsCom, FreedFlrsUK, GreenHope, PrimRoseAp, WildWisWool]

Teasel helps children learn to regulate their energy, for those that are hyper-active and then drop when exhausted, Teasel helps deliver a more moderate pace for playing and resting. [FreedFlrsUK]

## 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 *Pituïta* 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.)<sup>11</sup>;
- *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)<sup>12</sup>.

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 this case we call them *adust humors*). When burned, humors always produce Melancholia. Unani-

---

<sup>11</sup> 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.

<sup>12</sup> 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.

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 heat<sup>13</sup>. 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*<sup>14</sup> which are manifested by the emission or collection of purulent material, often even hardened (e.g., abscesses)<sup>15</sup>.

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*<sup>16</sup>, 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”, “limitation”, or “obstacle” has been applied. Like Fire, in fact, it is a form of “energy”, mobile in

---

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

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

15 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.

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

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).

## REFERENCES

[Acta]	<a href="https://www.actaplantarum.org">https://www.actaplantarum.org</a>
[AmDragon]	<a href="https://www.americandragon.com/Individualherbsupdate/XuDuan.html">https://www.americandragon.com/Individualherbsupdate/XuDuan.html</a> (Retrieved: 2019-01-08)
[AmHomPh]	O'Connor, Joseph T., Boericke & Tafel, <i>"The American homoeopathic pharmacopoeia"</i> , New York, Boericke & Tafel (1890); retrieved at <a href="https://collections.nlm.nih.gov/bookviewer?PID=nlm:nlmuid-101313392-bk">https://collections.nlm.nih.gov/bookviewer?PID=nlm:nlmuid-101313392-bk</a>
[Atzei]	Aldo Domenico Atzei, <i>"Le piante nella tradizione popolare della Sardegna"</i> , III ed., Carlo Delfino Editore, Sassari (2017)
[Bartolucci]	Bartolucci, F., Peruzzi, L., Galasso, G., Albano, A., Alessandrini, A., Ardenghi, N. M. G., ... Conti, F., <i>"An updated checklist of the vascular flora native to Italy"</i> , Plant Biosystems 2018, 152(2), 179–303; doi: 10.1080/11263504.2017.1419996
[Bingen]	Hildegard Von Bingen, <i>"Physica"</i> or <i>"Liber simplicis medicinae"</i> . Translation from Latin by Priscilla Throop, Healing Arts Press (1998)
[Blackwell]	
[CanineHerb]	<a href="https://www.canineherbalist.com/flower-essences/teasel-dipsacus-flower-essence">https://www.canineherbalist.com/flower-essences/teasel-dipsacus-flower-essence</a> (Retrieved: 2025-11-026)
[Culpeper]	Nicholas Culpeper, <i>"The Complete Herbal"</i> (1653) Nicholas Culpeper, <i>"The English Physician Enlarged"</i> , printed for A. and J. Churchill, London (1698) Nicholas Culpeper, Ebenezer Sibly, <i>"Culpeper's English Physician; and Complete Herbal"</i> , London (1789) Nicholas Culpeper, <i>"Culpeper's Complete Herbal"</i> , published by Richard Evans, London (1816)
[Culpeper-653]	Nicholas Culpeper, <i>"The Complete Herbal"</i> (1653)
[Culpeper-698]	Nicholas Culpeper, <i>"The English Physician Enlarged"</i> , printed for A. and J. Churchill, London (1698)
[Culpeper-789]	Nicholas Culpeper, Ebenezer Sibly, <i>"Culpeper's English Physician; and Complete Herbal"</i> , London (1789)
[Culpeper-816]	Nicholas Culpeper, <i>"Culpeper's Complete Herbal"</i> , published by Richard Evans, London (1816)
[ChinHerbInfo]	<a href="https://chineseherbinfo.com/">https://chineseherbinfo.com/</a>
[DeltaGardens]	<a href="https://deltagardens.com/collections/teasel-set-for-practitioners">https://deltagardens.com/collections/teasel-set-for-practitioners</a> (Retrieved: 2025-11-026)
[DewitLeunis]	Serge Dewit, Jean-Claude Leunis, <i>"Trattato Teorico e Pratico di Fitoterapia Ciclica"</i> , Nova Scripta Edizioni (2018) – Orig: <i>"Traité Théorique et Pratique de Phytothérapie Cyclique – Science de la rééquilibration biologique de l'organisme"</i> , Ed. Roger Jollois (1995)
[Duraffourd-Lapraz]	Christian Duraffourd et Jean-Claude Lapraz, <i>"Traité de phytothérapie clinique"</i> , Masson, Paris (2002)
[Dryades]	<a href="https://dryades.units.it/floritaly/index.php">https://dryades.units.it/floritaly/index.php</a>
[EarthAshram]	<a href="https://www.earthashram.com/product/flower-gem-essences">https://www.earthashram.com/product/flower-gem-essences</a> (Retrieved: 2025-11-026)
[ElatedEarth]	<a href="https://www.elatedearth.com/earthtemple/teasel-flower-essence">https://www.elatedearth.com/earthtemple/teasel-flower-essence</a> (Retrieved: 2025-11-026)
[FreedFlrsCom]	<a href="https://www.freedom-flowers.com/teasel-flower-essence/">https://www.freedom-flowers.com/teasel-flower-essence/</a> (Retrieved: 2025-11-026)
[FreedFlrsUK]	<a href="https://freedom-flowers.co.uk/teasel-flower-essence/">https://freedom-flowers.co.uk/teasel-flower-essence/</a> (Retrieved: 2025-11-026)
[GreenHope]	<a href="https://www.greenhopeessences.com/essences/teasel">https://www.greenhopeessences.com/essences/teasel</a> (Retrieved: 2025-11-026)
[Grieve]	M. Grieve, <i>"A Modern Herbal"</i> (1931)
[Guarino]	Guarino, C. (2008). <i>"Ethnobotanical Study of the Sannio Area, Campania, Southern Italy"</i> .

	Ethnobotany Research and Applications, 6, 255–317. Retrieved from <a href="https://ethnobotanyjournal.org/index.php/era/article/view/221">https://ethnobotanyjournal.org/index.php/era/article/view/221</a>
[Mcdonald]	Jim Mcdonald, <a href="https://herbcraft.org/backpain.html">https://herbcraft.org/backpain.html</a> (Retrieved: 2018-08-20)
[Hill]	Sir John Hill, <i>“The family herbal”</i> , London, George Virtue (1812)
[James]	Robert James, <i>“Pharmacopœia universalis: or, a new universal English dispensatory”</i> , 1747
[Kuhntinskaja]	Kuhntinskaja M. et al., <i>“Anticancer Effect of the Iridoid Glycoside Fraction from Dipsacus fullonum L. Leaves”</i> , Natural Product Communications. 2020;15(9). doi: 10.1177/1934578X20951417
[Li Wei]	Xu Li, Wang Wei, <i>“Chinese Materia Medica: Combinations and Applications”</i> , Donica Publishing (2002)
[Murphy]	Robin Murphy, <i>“Nature’s Materia Medica”</i> , 4.th edition, Lotus Health Institute (2020)
[Oszmiański]	Oszmiański Jan, Wojdyło Aneta, Juszczak Piotr, Nowicka Paulina, <i>“Roots and Leaf Extracts of Dipsacus fullonum L. and Their Biological Activities”</i> . Plants. 2020; 9(1):78. <a href="https://doi.org/10.3390/plants9010078">https://doi.org/10.3390/plants9010078</a>
[Palma]	Luigi Palma, <i>“Le piante medicinali d’Italia”</i> , Società Editrice Internazionale (1964) – Ristampa anastatica a cura di edizioni Erbae (2006)
[PorterSmith]	Frederick Porter Smith, George Ashur Stuart, <i>“Chinese Materia Medica – Vegetable Kingdom. Extensively revised from Dr. F. Porter Smith’s Work.”</i> , American Presbyterian Mission Press Shanghai, 1928
[POWO]	Kew Royal Botanic Gardens, Plants of the World Online, <a href="https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:447338-1">https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:447338-1</a>
[PrimRoseAp]	<a href="https://primroseapothecary.com/shop/p/teaselfloweressence">https://primroseapothecary.com/shop/p/teaselfloweressence</a> (Retrieved: 2025-11-026)
[Redwood]	Theophilus Redwood, <i>“Gray’s supplement to the Pharmacopoeia”</i> , II ed., London (1848)
[Reinhold]	Melanie Reinhold, <i>“Multimodale naturheilkundliche Therapie eines Pferdes nach Herpesimpfung”</i> , Zeitschrift für Ganzheitliche Tiermedizin 2013; 27(4): 135-137. doi: 10.1055/s-0033-1350918
[Saar-Reismaa]	Saar-Reismaa P, Bragina O, Kuhntinskaja M, Reile I, Laanet P-R, Kulp M, Vaher M. <i>“Extraction and Fractionation of Bioactives from Dipsacus fullonum L. Leaves and Evaluation of Their Anti-Borrelia Activity”</i> . Pharmaceuticals. 2022; 15(1):87. doi: 10.3390/ph15010087
[Scholten]	<a href="https://www.qjure.com">https://www.qjure.com</a>
[Skała]	Ewa Skała, Agnieszka Szopa, <i>“Dipsacus and Scabiosa Species—The Source of Specialized Metabolites with High Biological Relevance: A Review”</i> . Molecules 2023, 28, 3754. <a href="https://doi.org/10.3390/molecules28093754">https://doi.org/10.3390/molecules28093754</a>
[Shaw]	Shaw, Shackleton, <i>“Carnivory in the Teasel Dipsacus fullonum — The Effect of Experimental Feeding on Growth and Seed Set”</i> , doi:10.1371/journal.pone.0017935
[Storl]	Wolf D. Storl, <i>“Healing Lyme disease naturally”</i> , North Atlantic Books, Berkeley, California (2010)
[Vermeulen]	Frans Vermeulen, Linda Johnston, <i>“PLANTS – Homeopathic and Medicinal Uses from a Botanical Family Perspective”</i> , Saltire Books (2011)
[Wehmer]	Carl Wehmer, <i>“Die Pflanzenstoffe, botanisch-systematisch bearbeitet”</i> , Jena (1911)
[WildWisWool]	<a href="https://wildwisdomwool.com/blog/teasel-flower-essence">https://wildwisdomwool.com/blog/teasel-flower-essence</a> (Retrieved: 2025-11-026)
[Winston]	<a href="https://www.davidwinston.org/extracts/sichuanteaselroot.html">https://www.davidwinston.org/extracts/sichuanteaselroot.html</a> (Retrieved: 2018-08-20)
[Witkowska-Banaszczak]	Witkowska-Banaszczak Ewa, <i>“Dipsacus fullonum L. leaves and roots – identification of the components of the essential oils and alpha-amylase inhibitory activities of methanolic extracts”</i> , Acta Poloniae Pharmaceutica – Drug Research, Vol. 75 No. 4 pp. 951-957, 2018. doi: 10.32383/appdr/83747
[Wood]	Matthew Wood, <i>“The Earthwise Herbal – A Complete Guide to Old World Medicinal Plants”</i> , North Atlantic Books (2008)



[Zhao]	Ya-Min Zhao, Yan-Ping Shi, "Phytochemicals and biological activities of <i>Dipsacus</i> species", <i>Chem Biodivers.</i> , 2011 Mar;8(3):414-30. doi: 10.1002/cbdv.201000022.
--------	---