



## ILEX L.

**Order:** Aquifoliales Senft

**Family:** *Aquifoliaceae* Bercht. & J.Presl

*Ilex* is a genus comprising over 560 species of flowering plants in the family *Aquifoliaceae*, and it is the only living genus in that family. The *Ilex* species are evergreen or deciduous trees, shrubs, and climbers from tropics to temperate zones worldwide. The type species is *Ilex aquifolium*, the common European holly.

Several *Ilex* species are used worldwide as medicine or to make traditional beverages. *Mate* or *maté*, also known as *chimarrão*, is a traditional South American infused drink prepared by soaking dried leaves of Yerba mate (*Ilex paraguariensis*) in hot water. Also, *I. guayusa*, Kuding (*I. kaushue*), Yaupon (*I. vomitoria*) are used to make similar infusions. Leaves of other species, such as gallberry (*I. glabra*) are bitter and emetic. [HPathySchool]

In the American southeast & southwest, yaupon holly (*I. vomitoria*) was used in mystic cultic practices, overimbibed to induce vomiting & hallucination as a purification ritual. Archeologists have found ritual shell-cups with the evaporated holly residue dating to 1,200 BCE. [HPathySchool]

Some *Ilex* species are also used in Chinese medicine (see the “*Ilex species used in Chinese Medicine*” paragraph).

Modern scientific research has highlighted the neuroprotective action of the extracts of different species of *Ilex*, in models of ischemia and neurodegenerative diseases such as Parkinson’s and Alzheimer diseases (see for instance [Kim, Fang, Medeiros, Milioli, Nguyen, Taravini, Tribbia]).

## ILEX AQUIFOLIUM L.

<i>Primary functionality:</i>	Saturn
<i>Secondary functionality:</i>	Mars, Jupiter
<i>Nature:</i>	ambivalent with respect to the Warm/Cold polarity, slightly warm
<i>Taste:</i>	bitter, slightly acrid, slightly sweet, slightly astringent
<i>Tropism:</i>	kidneys and adrenal glands, eye, ear, breast, lung, central nervous system, osteoarticular system, veins
<i>Humoral actions</i> <sup>1</sup> :	expel corrupt humors (Phlegm, also thickened, Yellow Bile and Tension) and regulates Melancholia. Tonify the function of the kidneys/adrenals and stomach

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<sup>1</sup> See the “*Notes on humors*” paragraph.

<i>Tissue states:</i>	excess of phlegm, yellow bile and tension; deficiency or excess of Melancholia; functional deficiency of kidneys/adrenals and stomach
<i>Clinical actions:</i>	analgesic/anti-inflammatory, antiarthritic, antidiarrheal, antiepileptic, antigout, antirheumatic, antisclerotic, antispasmodic, expectorant, diaphoretic, diuretic, emetic, emmenagogue, emollient, febrifuge, hypotensive, laxative/purgative, nervine, resolutive, venotonic, adrenal tonic, antitussive
<i>Used parts:</i>	leaves, roots, berries, bark; young shoots

## Description

Holly is an evergreen, dioecious shrub or small tree up to 8-10 m tall. Used mostly for decorative purposes, especially during the Christmas period, it is actually a plant with remarkable therapeutic virtues, even if it is no longer used for curative purposes because it is considered toxic or even poisonous. In fact, the only part of the plant that has a certain toxicity is the berries, which are highly purgative and emetic (see paragraph "*Contraindications and side effects*").

The leaves of *Ilex aquifolium* are persistent (they last on average 2-3 years) and leathery and show a strong polymorphism: some have oval or elliptical, wavy lamina, with a thorny margin (generally these are found on the lower branches), while others (generally localized on the upper branches and on the suckers) have an entire lamina which is sharp only at the apex.

The production of prickly leaves in *Ilex* L. is a plastic defensive response induced by mammalian browsing, aimed at reducing herbivory. Browsed shrubs tend to exhibit reduced annual shoot growth, increased branching, and produce smaller leaves with high spinescence. The regrowth on browsed branches of holly trees is characterized by increased leaf spinescence relative to unbrowsed branches. The two leaf types differ in the extent of genome-wide DNA cytosine methylation, as shown by the significant decline in mean per-marker probability of methylation from nonprickly to prickly leaves on contiguous positions of the same branchlet. [Herrera, Obeso]

Spinescence therefore represents a natural defense of the species against the bite of herbivores and therefore it is present mostly on the lower branches, which are more easily accessible: *the tree protects itself only when it needs to do so*.

The upper surface of the leaves is shiny and this allows the holly to disperse the light that comes from the sky towards the interior of the forest.

Although it is an evergreen mountain tree (it tends to vegetate in beech, fir-beech and oak-hornbeam forests, up to 1500m above sea level), it does not have needle-like leaves. Clearly, however, unlike conifers, it does not produce resin.

In windswept areas, the holly branches tend to curve downwards, forming a barrier against the incident wind, as if to protect the undergrowth. Where the wind always blows in the same direction (for example, at the edge of a grove), the branches that are located in the direction from which the wind blows curve down to the ground, while the branches placed in more sheltered positions tend to grow straighter. Again, the holly protects only when there is a need: [*Holly speaks of protection with discernment. [...] The tree only protects when it needs to. A lesson for us we don't need our defenses up all the time!*] [SensSol].

A sacred plant among the Celts, the holly was consecrated to the god Taranis (the equivalent of Thor among the Germans). The club of the green giant Yul, guardian god, is made with holly and has the ability to ward off lightning. Traditionally, the Celts used to hang holly fronds on the house doors and stables to protect them from lightning and to ward off evil spirits and malevolent forces. [Andrienne]

The dried holly branches ignite easily and hold the flame without making much smoke; with their living flame they are able to illuminate the surroundings [Atzei].

In the Black Forest and, in ancient times, also in Sardinia, an herbal tea similar to South American Mate was prepared with the leaves. [Atzei, Globalnet, Grieve] Although a 1967 study reported the presence of theobromine in holly leaves [Bohinc], recent studies have instead demonstrated the complete absence of methylxanthines [Negrin].

In Sardinia, the roasted seeds were used as a substitute for coffee and the berries were sometimes put in wine to make it sweeter. The decoction prepared with the dried bark, after macerating it in water for two days and throwing away the steeping water, was used as a refreshing drink and thirst quencher, sweetened with honey. [Atzei]

Holly is anti-arthritic, anti-epileptic, anti-diarrheal, pain-relieving/anti-inflammatory, anti-gout, anti-rheumatic, anti-sclerotic, antispasmodic, febrifuge, expectorant, diaphoretic, diuretic, emetic, emmenagogue, emollient, hypotensive, purgative, nervine, resolute, venotonic, adrenal gland tonic, antitussive remedy. It has been used for the treatment of fevers (especially intermittent ones), chronic catarrh, pleurisy, gastrointestinal colic, urinary tract problems. The juice of the leaves has been recommended for jaundice.

The bruised and fermented bark yields a viscous substance called *birdlime* that has been used to "stick" birds: applied externally as a cataplasm, it has a resolving or maturative qualities and has been used to alleviate the pain of gout. [Piterà, Piterà2, Rousseau]

The root has the same emollient and resolving properties as the bark. [Rousseau]

## **Properties**

### ***Temperature and taste***

Holly leaves have a bitter, acrid (due to the presence of saponins), slightly sweet, slightly astringent taste.

In the fresh leaf, the tastes are not particularly intense. However, the bitterness is immediately perceived also at the root of the tongue, an area where also an acrid sensation is felt, that is probably due to the presence of saponins. The leaf confers a slight waxy sensation in the mouth, most likely due to the waxy substances present in the cuticle.

The sweet taste (similar to that of apple and olive leaves and probably not due to sugars) is vague, faint, but persistent and also remains as an aftertaste in the throat. The astringent sensation is not very strong, but it also remains persistent, along with the sensation of wax in the mouth.

The leaf has also a herbaceous smell that is very reminiscent of freshly cut English ivy.

The plant can be classified as slightly warm, but its temperature is actually ambivalent with respect to the Heat/Coldness polarity: as a Saturnine plant, it has a decidedly cooling action which

is however more than mitigated by the secondary Martial function (which, for example, manifests itself both in the acrid pungency of the saponins and in the more “physical” pungency of the spines). It is a plant capable of retaining heat even when vegetating in the mountains, despite having not needle-like leaves.

### ***Signatures***

An evergreen and “dark” plant, holly has a primarily Saturnine functionality. Even the color of the wood, very light or almost white when dry, reminds of the white/black polarity of the functionality. The Romans used to wear holly wreaths or sprigs during the Saturnalia.

The spininess (present where and when needed) and the spherical red berries (blood) are both signs that refer to the secondary martial function of holly, a plant which is traditionally associated with lightning (from which it protects) and consecrated to the gods of thunder and of war, Tharanis (Celtic) and Odin and Thor (Scandinavian). According to some authors (see, for example, [Forest]), Gungnir, the spear of Odin, is said to be made from holly wood.

According to Angelo Angelini, the primary holly function is Saturn; the secondary function is Jupiter (Veins); the Potentials are: Aquarius (Veins) and Libra (Kidneys) [Angelini]

### ***Tissue phases***

2 (inflammation), 3 (deposition), 6 (disorganization) [DewitLeunis]

## **Actions and indications**

### ***Humoral actions***

Holly has a complex action upon the human body. Like all plants which are at the same time bitter and sweet, it is eliminative, tonifying and soothing. For this reason, it is able to eliminate phlegmatic and phlegmatic-bilious humoral dregs, and to moderate inflammation and spasms. Therefore it acts as an anti-inflammatory/pain relieving, expectorant, fluid draining remedy.

Its acrid pungency dissipates excess Tension, moderating spasms, convulsions, epilepsy, hypertension, and promotes diaphoresis, diuresis and menstrual flow. At the same time, being also sweet, it tonifies some body “functional” aspects (it treats Tension deficit), acting, for example, as an adrenal tonic.

Being bitter and acrid at the same time, it has a marked action on fevers, especially on intermittent ones. Its sweetness moderates this action which develops gradually and does not cause excessive “dissipation” of humors and Tension.

Its astringency makes it able of acting as a hemostatic (also thanks to the Martial function) and a venous tonic (Jovinian function). However, it is mainly an eliminative plant, so it is not generally indicated (alone) in cases of body fluid deficiency.

The Saturnine function gives holly competence over the spleen and the ability to act on hardened tissues (sclerosis), on the elimination processes, and on bone consolidation (fractures).

## ***Tropism***

Holly has an elective tropism for the kidneys and adrenal glands, eye, ear, breast, lung, central nervous system, osteoarticular system, veins. It has also a marked action upon sclerotic tissues.

## ***Clinical actions***

Analgesic/anti-inflammatory, antiarthritic, antidiarrheal, antiepileptic, antigout, antirheumatic, antisclerotic, antispasmodic, expectorant, diaphoretic, diuretic, emetic, emmenagogue, emollient, febrifuge, hypotensive, laxative/purgative, nervine, resolutive, venotonic, adrenal tonic, antitussive.

### *Principal actions:*

- Analgesic/anti-inflammatory [Andrienne, Atzei, Grieve, Piterà, Piterà2]
  - anti-rheumatic [Andrienne, Atzei, Grieve, Piterà, Piterà2];
  - emollient-sedative in bronchitis (leaf or bark decoction) [Atzei]
  
- febrifuge (infusion or decoction of bark, infusion or decoction of leaf, powder of leaves macerated/boiled in water or white wine, bud extract) [Andrienne, Atzei, FB-Wood, Globalnet, Grieve, INTOX, Ledoux, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  - low grade fevers with indistinct chills [FB-Wood]
  - intermittent fevers [Grieve, INTOX, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  
- expectorant, antitussive<sup>2</sup> [Grieve, Rousseau, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  - in cough, phlegm, chronic catarrh, chronic bronchial catarrh [Grieve, Rousseau, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  
- diaphoretic (leaf infusion or decoction) [Grieve, Piterà, Piterà2, Targioni-Tozzetti]
  
- diuretic [Andrienne, Angelini, Atzei, Grieve, Riverdale, Rousseau]
  - in cases of oliguria and nephroangiosclerosis (young shoots and young roots bud extract) [Piterà, Piterà2]
  - lithontriptic [Pieroni]
  
- antispasmodic [Andrienne, Atzei, Riverdale, Rousseau]
  - sedative of colic spasms (hot infusion of leaf or root; leaf infusion or decoction) [Andrienne, Atzei]
  - intestinal antispasmodic in diarrhea, coeliac disease, IBS, colitis, gastritis [Riverdale]

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<sup>2</sup> Antitussive specifically for its expectorant rather than sedative action on the cough.

- laxative/purgative (berries) [Atzei, Grieve, Piterà, Piterà2, Targioni-Tozzetti].
  - Liter.: *“purgative, taken whole in number of 10-12.”* [Targioni-Tozzetti]
  - Liter.: *“violently emetic and purgative”* [Grieve]
  
- emetic (berries) [Grieve, Piterà, Piterà2]
  - Liter.: *“a very few occasioning excessive vomiting soon after they are swallowed, though thrushes and blackbirds eat them with impunity.”* [Grieve]
  - Liter.: *“one of the best natural diuretics for the treatment of oliguria, in urinary lithiasis, uremia, in cases of gout, in the treatment of ascites, serous collection in the peritoneal cavity.”* [Angelini]
  
- venous tonic [Angelini]
  - Liter.: *“It is one of the best astringents of the venous system, the most effective that exists in the plant field. It is very suitable for venous and capillary diseases, in the treatment of varicose veins and venous relaxations, in the after-effects of phlebitis, in edema of the legs when there is swelling with collection of serum.”* [Angelini]
  
- Anti-diarrheal (decoction of leaf or spring-collected bark) [Atzei, Piterà, Piterà2]
  
- Emmenagogue [Atzei]
  
- Anti-epileptic (decoction of dried leaf or bark [Atzei]) [Atzei, Piterà, Piterà2]
  
- Nervine
  - sedative (bark decoction) [Atzei]
  - anti-hysterical [Atzei]
  - ortho- and para-sympathetic regulator [Piterà, Piterà2]
  
- Adrenal tonic [Andrienne]
  
- Hypotensive (bud extract) [Andrienne, Ledoux]
  
- Anti-sclerotic (bud extract) [Andrienne, Piterà, Piterà2]
  - Liter.: *“it helps reduce aging and thickening of the lens of the eyes”* [Andrienne]
  - antiarthrosic (bud extract, young roots) [Piterà, Piterà2]
  - against arthrotendinous sclerosis [Piterà, Piterà2]

- emollient and resolutive (for external use: pounded leaves or bark, root, birdlime, cooked and applied root peel) [Atzei, Durante, Mattioli, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  - Liter.: *“it resolves, and softens the hardenings, and the swellings”* [Mattioli]; *“it resolves, & softens the hardenings, & the inflammations”* [Durante]
  - Liter.: *“For external use it was used as a resolutive, applying the fresh leaves bruised on white tumors, in engorgements and glandular obstructions, in edema.”* [Piterà, Piterà2]

## ***Specific indications***

### *Mind*

- Hatred, anger
  - Feeling hatred or feeling hated; hatred and anger, especially anger associated with injustice and impersonal issues [FB-Wood]
  - Liter.: *“for those who sometimes are attacked by thoughts of such kind as jealousy, envy, revenge, suspicion. For the different forms of vexation. Within themselves, they may suffer much, often when there is no real cause for their unhappiness.”* [Bach]
- *“It instills resistance and courage and helps to find energy during the difficult moments of life”* [Ledoux].
- It teaches us to protect ourselves only when it is indispensable and to look at problems with detachment, “from above”, letting go of defenses when they are not necessary: *“[Holly] speaks of protection with discernment. [...] The tree only protects when it needs to. A lesson for us we don’t need our defenses up all the time!”* [SensSol].

### *General*

- Tissue sclerosis (especially kidneys, breasts and lungs, eyes, ears, joints) [Andrienne, Ledoux, Piterà, Piterà2, Rozencwajg]
  - Liter.: *“it is able to revive sclerotic tissues”* [Ledoux]
- Modalities:
  - With pains in the spleen that > in winter (Cooper) [Clarke, Piterà, Piterà2]
  - All symptoms > in winter [Boericke]

### *Immune system*

- Fever, intermittent fevers, malaria [Clarke, Globalnet, Grieve, INTOX, Ledoux, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
  - succedaneum for cinchona bark, works when cinchona fails.

- Liter.: “powdered, or taken in infusion or decoction, have been employed with success where Cinchona has failed” [Grieve]
- Liter.: Fever does not drop abruptly as with cinchona but it subsides slowly and progressively over a maximum of twenty days. [Piterà, Piterà2]
- Liter.: The powdered leaves are given at a dose of 2-6 scruples<sup>3</sup> in water or white wine, two hours before fits. [Targioni-Tozzetti]
  - Sequelae of intermittent fevers and malaria. [Piterà, Piterà2]
- Bartonella: “I felt like the disease hated me. [...] after six months it was causing congestion in the back brain, ears, and mastoids [...] and I was having fits of exhaustion, which is very threatening. [...] I picked and ate the leaves of the English Holly and occasionally the American. After 5 days of healing crisis I felt relieved of the fatigue and now I never have that symptom.” [FB-Wood]
- Smallpox [Grieve]

### *Nervous system*

- Spastic nervous imbalances [Ledoux]
- Epilepsy; adolescent epilepsy; petit mal (bud extract) [Andrienne, Henry, Ledoux, Piterà, Piterà2]; together with *Tilia tomentosa* [Andrienne, Ledoux] and/or *Ficus carica* [Andrienne]
- Psychomotor alterations, nervous asthenia [Piterà, Piterà2]
- Ortho- and para-sympathetic imbalances [Ledoux, Piterà, Piterà2]
  - Liter.: “ortho- and para-sympathetic regulator (properties similar to serotonin), reduces nervous asthenia and neurodistonic states characterized by psychomotor alterations and visceral spasms” [Piterà, Piterà2]

### *Gastrointestinal system*

- Gastrointestinal spasms (colic) [Andrienne, Culpeper, Grieve, Ledoux, Piterà, Piterà2, Riverdale, Rousseau, Targioni-Tozzetti]
  - can be used for diarrhea, coeliac disease, IBS, colitis [Riverdale] and gastritis. [Riverdale, Rozencwajg]
  - in nervous subjects [Ledoux]
- Rectal fissures [Riverdale]
- Jaundice [Andrienne, Clarke, Grieve, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
- Painful digestions, gastralgia. [Piterà, Piterà2]
- Diarrhoea [Atzei, Clarke, Piterà, Piterà2, Riverdale ]
  - with mucous discharges (Cooper) [Piterà, Piterà2]
- Pains in the spleen that > in winter (Cooper) [Clarke, Piterà, Piterà2]

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<sup>3</sup> The Italian measurement unit “denaro” roughly corresponds to the “scruple”. It corresponds to abt. 1,09-1,34g.



- Visceral spasms from autonomic imbalance. [Piterà, Piterà2]

### *Respiratory system*

- Catarrh, chronic catarrh, chronic bronchial catarrh [Grieve, Rousseau, Targioni-Tozzetti]
- Cough [Atzei, Clarke, Globalnet, Piterà, Piterà2, Rousseau, Targioni-Tozzetti], chronic cough [Ledoux, Piterà, Piterà2]
- Pleurisy [Clarke, Grieve, Piterà, Piterà2, Rousseau, Targioni-Tozzetti]
- Pulmonary emphysema (bud extract) [Ledoux, Piterà, Piterà2]
- Bronchitis [Atzei]

### *Kidneys and urinary system*

- Diseases of the urinary organs [Rousseau]
- As a diuretic [Andrienne, Angelini, Atzei, Grieve, Riverdale, Rousseau]; in case of:
  - oliguria [Angelini]
  - urinary stones (lithontriptic) [Angelini, Pieroni]
  - uremia [Angelini]
  - ascites [Angelini]
  - anasarca [Angelini, Grieve]
  - edema of the legs [Angelini]
  - renal failure from nephroangiosclerosis (bud extract, with *Fagus sylvatica*) [Andrienne, Ledoux, Piterà, Piterà2]
- Nephroangiosclerosis (bud extract, with *Fagus sylvatica*) [Andrienne, Ledoux]
- Adrenal insufficiency, adrenal tonic [Andrienne Ledoux, Piterà, Piterà2]
  - slight adrenal insufficiency [Piterà, Piterà2]

### *Reproductive system and sexual organs*

- MALE: Feeling of irritation in urethra with constant dropping from orifice, probably prostatic (disappeared after a dose of  $\emptyset$ , Cooper) [Clarke, Piterà, Piterà2].
- FEMALE: Mastitis, mastodynia, fibrosclerous hyperplasia of the breast [Andrienne, Henry, Ledoux, Piterà, Piterà2]; fibroadenosis or fibroadenocystic mastopathy (complementary of and synergistic with *Alnus incana*, *Betula verrucosa* and *Rubus idaeus*, alternated or in association [Piterà, Piterà2]; with *Betula verrucosa*, but also *Viscum album* or *Rubus idaeus* [Ledoux]).

### *Cardiovascular system*

- Hypertension [Scholten]
- Venous tonic, in case of:
  - varicose veins and venous relaxations [Angelini]
  - sequelae of phlebitis [Angelini]
  - edema of the legs [Angelini]

### *Lymphatic system*

- *“Drains lymph vessels especially in the upper body, recommended for benign breast cysts, lymphadenopathy around neck and axilla.”* [Koenig]

### *Muscular and skeletal systems*

- Bone fractures, post-traumatic joint swelling and hardening [Culpeper, Durante, Grieve, Mattioli, Piterà, Piterà2] (external use: root decoction, cooked and applied root peel, bark and leaves as fomentations; internal use: bud extract, young roots)
  - Liter.: *“resolves and softens hardness”* (root decoction for external use [Mattioli] or poultice with cooked root peel [Durante])
  - consolidation of bone fractures (young roots, bud extract) [Piterà, Piterà2]
- sprains (external use) [Culpeper, Durante, Grieve, Mattioli]
  - Liter.: *“softens the joints hardened by sprains”* [Mattioli]
- Arthritis, rheumatic arthritis, arthrosis (osteoarthritis) [Andrienne, Clarke, Globalnet, Piterà, Piterà2, Scholten]
- Rheumatism [Andrienne, Atzei, Clarke, Globalnet, Grieve, INTOX, Piterà, Piterà2, Scholten]
  - as a reliever of rheumatic pains [Atzei]
  - rheumatic diathesis (especially young roots, bud extract) [Andrienne, Piterà, Piterà2]
- Gout [Angelini, Atzei, Clarke, Piterà, Piterà2]; gouty diathesis (especially young roots, bud extract) [Piterà, Piterà2]
- post-traumatic algoneurodystrophy of the foot and hand, hallux valgus, sprains (joint, tibio-tarsal), trigger finger, epicondylitis, epitrocleitis, plantar fasciitis, joint inflammation, joint, peri-articular, bone and spine injuries, dislocations, Dupuytren’s disease, Ledderhose’s disease, post-traumatic osteonecrosis, joint stiffness (including post-traumatic), rhizoarthrosis, tendon sclerosis, Barré-Lieou cervical syndrome, frozen shoulder, tenosynovitis (young roots, bud extract) [Piterà, Piterà2]

### *Skin*

- Skin drainage (gemmotherapy) [Riverdale]
- Eczema [Rozenchwajg], eczema with fissures [Riverdale]

- Psoriasis [Riverdale, Rozencwajg]
- Skin diseases [Piterà, Piterà2]
- Psoriasis (alopecia) from sprue [Clarke, Piterà, Piterà2]
- Rashes [Targioni-Tozzetti]
- White tumors, engorges, glandular obstructions, edema (fresh bruised leaves, external use) [Piterà, Piterà2]

### Eyes

- Ophthalmic rheumatism, rheumatic inflammation of the eyes with periostitis of the frontal bone causing staphylomatous cornea degeneration [Andrienne, Clarke, Piterà, Piterà2]
  - Liter.: *“There is a kind of rheumatism in which the bones around the eye, especially the front, are affected. The periosteum swells, the cornea loses its lucidity and peels off, and after its destruction the humors of the eye come out. Ilex aquifolium is the only simillimum for such a morbid process. The green plant must be harvested in June, root and plant, cut into small pieces and one part macerated in 95% alcohol, the other part in water, and then both mixed together”*. [Piterà, Piterà2]
- Corneal staphyloma (bud extract) [Andrienne, Piterà, Piterà2]
- Cataract [Andrienne, Piterà, Piterà2]
  - Liter.: *“It helps reduce aging and thickening of the lens of the eyes”* [Andrienne]
- Conjunctivitis, painful conjunctivitis with burning pains in the eye sockets [Andrienne, Piterà, Piterà2]
- Ocular complications from chronic sinusitis [Piterà, Piterà2]
- Inflammatory forms of the eyes, rheumatic iridocyclitis, ophthalmopathies in general [Piterà, Piterà2]

### Ears

- Deafness, hearing loss, chronic deafness from tympanosclerosis [Andrienne, Piterà, Piterà2]; with pains in the spleen that > in winter. (Cooper)
  - Liter.: *“Dr. Cooper reports the healing of a difficult case of chronic deafness complicated by pain in the spleen that had the particularity of improving in winter.”* [Piterà, Piterà2]
- Eardrum sclerosis [Andrienne, Piterà, Piterà2]
- Ringing, Tinnitus (bud extract) [Andrienne, Piterà, Piterà2]; with *Sorbus domestica* and *Viburnum lantana* [Piterà, Piterà2]

### *External use*

- Birdlime, applied externally as a cataplasm (possibly mixed with resin and wax in equal parts), with resolving or maturative qualities: to alleviate the pain of gout; abscesses, swellings and tumors [Piterà, Piterà2, Rousseau]
- Hemorrhages (berries) [Grieve]
  - Liter.: *“The berries have been employed in powder, as an astringent to check bleeding.”* [Grieve]

### **Parts used and their collection**

Holly leaves and twigs, roots, berries, bark can be used.

In gemmotherapy, bud extracts can be made with:

- young shoots collected at the vegetative restart in spring before flowering, selecting those not longer than 1-2 cm;
- young roots collected in autumn [Piterà, Piterà2].

In homeopathy, the mother tincture is prepared with the young twigs with fresh leaves and berries [Clarke].

Berries should be avoided to minimize the risk of intoxication; if needed, they are harvested at full maturity.

The leaves must be harvested before flowering, in February or April-May, or alternatively in September-October, preferring those mature and already well formed. [Angelini, Globalnet] Rousseau preferred to use spineless leaves. [Rousseau]

The bark is harvested throughout the year, but preferably in autumn or spring, by detaching it from young branches [Angelini]. The mature roots are preferentially harvested during the autumn-winter period.

### **Preparation and dosage**

The leaves can be used in infusion, in decoction, in tincture, in vinous tincture or they can be dried and pulverized and administered after being macerated in water or white wine (see [Rousseau]).

The berries should be used with great caution and at a low dosage (preferably in homeopathic dilution).

In case of intermittent fevers, it is recommended to administer a strong leaf decoction (half an ounce of fresh or dried leaves in 8-10 ounces of water boiled until the liquid is reduced to half) or the macerated leaf powder two hours before each access, until the fever subsides or up to 8-15 days [Rousseau, Targioni-Tozzetti].

## Contraindications and side effects

Even though considered a toxic or poisonous plant, any real toxicity of *I. aquifolium* is limited to the fruits, that are strongly laxative and can induce nausea and vomiting. The fruits contain saponins, a bitter glycoside (ilicine) and a cyanogenetic glycoside (2-β-D-glucopyranosyloxy-p-hydroxy-6,7-dihydromandelonitrile), but the intoxication symptoms, that usually include nausea, vomiting and diarrhea, are probably due to the saponin content only. The leaves and branches can be considered devoid of any significant toxicity. [Burrows, CBIF, Globalnet, Intox, Nelson, Olson]

## Homeopathy

[Boericke, Clarke, Scholten]

There is a great lack of information about the Aquifoliales, and only Aquifoliaceae are known partially. Information about *Ilex aquifolium* is scanty; only Jan Scholten did a sense proving, the other authors (e.g., Boericke, Clarke, Cooper) only reporting very few symptoms that mostly come from the use of the plant in herbal medicine.

### CLINICAL

Diarrhea. Intermittent fever. Jaundice. Psilosis. Spleen pain. Staphyloma. Marked eye symptoms. All symptoms better in winter.

### Mind

- Autonomy is the most important issue in life. They do not want to be interfered with, preferring to be left alone. They have a strong aversion to authority and domineering people.
- Defense to a threat, annoyance, invasion from outside.
- Anger, rage, hatred, accusation antagonism, violence, injuring oneself and others. Malicious, vindictive, squeeze others tight, pulling hair, fierce tantrums.
- Fighter mentality, agitated, aggressive, in words, gestures, held within.
- Suspicion, envy, jealousy, revenge, anger, wounded pride.
- Suffering, agony, < abuse, < vexation, < annoyed.
- Antisocial personality disorder, conduct disorder, paranoid personality disorder, delusional disorder, aggressive or jealous features, persecutory, paranoid delusions. Exhaustion, frazzled nerves, < overstimulated by environmental impact, excessive noise, turmoil.
- Long for quiet repose and peaceful surroundings.
- Feeling cut off from love; jealousy, envy, suspicion, anger.
- Thorny, spiny, teasing, nagging, spite. Restless, impatient.
- Kindness, inner beauty, good intentions, hidden behind the aggressive facade.

- Working in old age to earn his income. Persistent, rigid, decided, serious. Confrontations through monomania. Oversensitive to influences and ideas. Dominant.
- Erotic, no kissing.
- Jealousy, < old age.
- Guilt, << jealousy, < limiting the freedom of others.
- Religious, holy, praying, serene, devotion, mystic; purifying; existing in more dimensions.
- Unconscious.
- Fear: robbers.
- Delusion: has rights, << injustice.
- Themes: red, rose, black; boats, water; antiques, futuristic; becoming lost, hiding.

### **General**

Time: > winter.

### **Local**

- *Fever:*
  - intermittent, malarial.
- *Head:*
  - headaches, migraines, tension, < annoying experiences, < suppressed anger; periostitis of the frontal bone.
- *Eyes:*
  - cornea infiltration, degeneration, keratitis; pain, burning, smarting, biting, in orbits, < night; rheumatic inflammation; staphyloma; eyeball looked a lump of flesh.
- *Ears:*
  - chronic deafness.
- *Nose:*
  - influenza.
- *Face:*
  - hairy; falling of eyebrows.
- *Mouth:*
  - thrush.
- *Lungs:*
  - coughs, pleurisy; bronchitis, chronic; pneumonia.
- *Heart:*
  - hypertension.

- *Chest:*
  - catarrh.
- *Stomach:*
  - cramp.
- *Abdomen:*
  - colic; spleen pain, enlargement; jaundice.
- *Rectum:*
  - diarrhoea, with mucous flux.
- *Urinary:*
  - irritation, urethra, constant dropping from orifice, prostate; urination frequent; urine, uric acid, stones; oedema.
    - Liter.: “A feeling of irritation in urethra with constant dropping from orifice, probably prostatic, in a man about 50, disappeared after a dose of ∅.” [Clarke]
- *Male:*
  - prostate, erection problems.
- *Female:*
  - infertility; menses irregular, menopausal flooding, flushes.
- *Limbs:*
  - gout; rheumatism, rheumatic arthritis, proximal interphalangeal joints 3 and 4; periostitis.
- *Skin:*
  - cyanosis, black spots; excessive growth of hair.

### ***The School of Homeopathy***

“*The School of Homeopathy*” provide the following *I. aquifolium* proving information [Hpathy].

#### ***Holly key proving themes***

##### **Calm, carefree and connected**

Seeking connection, feeling content, laidback calm, comfortable, mindful. There are no worries, still, loving and peaceful.

##### **Forceful, sure, brave and strong**

Feeling stronger and not restricting myself, sure within myself, and also standing up for myself, indifference. Not accepting situations, sense of justice and appropriateness. A feeling of power and standing up for oneself -courageous, I was not bothered, could be domineering, bit forceful.

### **Indifferent and withdrawal**

Detached, aloof, spaced out, leading to being misunderstood. Nothing mattered, nothing was making me angry or upset. Unable to communicate. Isolated, closed off, quite, can be happy and calm in isolated place or feel lonely and insignificant.

### **Focus, energy and action**

Highly Productive, getting lots done. Vitality increased, massive creative fix-it energy, busy, achieved many things. Feeling motivated, with good brain power. Meeting deadlines, creating order. Feeling social, focused, energetic. No need to sleep, cannot sleep, or disturbed sleep.

### **Sadness, depressed and down**

Feeling melanchic and sad. Moaning & complaining, Powerlessness, Desire to withdraw, feeling miserable. Coldness and indifference.

### **Forgetful and lack of concentration**

Loss of concentration and memory, distracted, tiredness, brain dead, lack of concentration. Feeling misunderstood like dementia and Alzheimer's. Unable to perform simple tasks, closing off, foggy and forgetful - memory fading. Forgot spellings/vocabulary, lost track of conversations, muddled.

### **Exhausted, Tired and struggling**

Slowing down, severe lack of energy, lagging, needed rest, struggling to finish everything. Extreme exhaustion and heaviness and requiring more sleep than usual. On the passive plane, slow and static. Constipated. Dispassionate. Frustrated, inadequate, failure, less efficient, no energy, overwhelmed, sighing, struggling, unsupported, weakness.

### **Angry and violent**

Sudden, violence, blood, threat, desire to kill, intensive, explosive temper, screaming loudly, blaming, violent destructive dreams, impatient, insulted, feelings of betrayal.

### **War, shot and dead**

Gunshot type pain, sudden intense, war, police, death, Sensation of being shot in the calf, Sensation of being shot in the head, Imagining my brother dead, Imagining family members dead, suicidal despair, evil.

### **Confused/disorientated, Vertigo and dizzy**

Fragmented, disorientated, disorganised, confusion. Bewildered with vertigo, creeping circular swaying dizziness. Faint, woozy and spaced out.



## Red and Blood

Colour Red. Desire for red desire. Blood as a symbol of suffering. People wanting to wear red clothes or buy red ornaments. Seeing blood and a fascination with seeing gore. Enjoyment of red sunsets.

### Physicals

- Sex & libido and sexuality.
- Sharp, piercing, penetrative, pains, sharp burning pains, Sharp pains, prickly.
- Insomnia, sleep, tired, awake.
- Cold, chilling and freezing. Low temperature, chilly, ice, snow.
- Sneezing, congestion in nose, mucousy cough runny/watery discharge.
- Lumps, bumps, bulges, spots, bites, jelly, squidgy.
- Metal taste, loss of appetite, eating lettuce, nausea, sick, thirst, thirsty, spices, hungry, starving, saliva, queasy.
- Abdominal pains with heaviness; increased appetite.

Some cured symptoms in the provers:

- People don't bother me anymore.
- Stand up for myself.
- Cleared deep grief.
- My husband says I'm a nicer person. I feel lighter.
- I feel calm.
- I feel very positive.
- Cured bronchiectasis, shortness of breath, green mucus.

### Polarities

- Intense energy with highs and lows (ups and downs).
- Calm / Danger
- Powerful / Powerless
- Happy / Depressed (Exhausted)
- Accepting / Angry (Hopelessness)
- Hot / Cold
- Connected / Indifference to everything

Sense of a struggle (in dreams as well as in reality).

Sharp pains; piercing, cutting.

The colour red.

### ***Analysis of Themes from Year 3 & 4 Overview Assignments***

#### **Energy (high and low)**

“full of energy, feeling attractive and sunny, confident and patient” “low energy, sleepiness and struggling to concentrate” “a sense that I had to keep going, had to push through the tiredness, that if I allowed myself to stop then I would never start again” “an exhaustion that rarely lifts” “no energy, am always tired and desperate to lie down and go to sleep (and sometimes it seems I have no choice but to do this)... mostly I won’t allow myself to do this and instead dredge deep into my reserves to summon up energy that has a manic feel to it” “I’m so tired and my concentration is so poor and so I have to keep working, have to push myself more. All I want to do is stop. The last thing I can do is stop.” “yawning excessively, extreme yawns went on for ages with sleepiness almost like narcolepsy with heavy eyes” “yawning in the first few days as the energy of the proving began to build, and yet I was rushing around. They noticed my furious energy even more.”

#### **Achievement and positivity**

“sense of getting things done”, great clarity, “calm, mindful, present, comfortable and sure within myself, and also standing up for myself.” “Not accepting situations, or being treated in ways, that I did not find myself fully comfortable with” “sense of justice, appropriateness and self-worth was highly marked.” “interact with others more easily than usual (without being stressed/anxious about what others think), and also speak my mind when not being happy about something. I have been calmer, less irritable and more content than normal”. Mind-related (calm, at ease) “extremely productive getting lots of things done that I had been putting off” “standing up for myself”.

#### **Energy and self-focus**

“a tendency to get things done, much less thinking and a lot more acting, and also a lot more energy. It was all about me being in the moment and putting my energy in whatever I was doing instead of thinking about it. It was not about the outcome but about allowing me to express myself. There was a lot less worrying about how others would feel and what they would think and how that would make me feel; the focus was on me, it was as if the others did not matter as much, there was no room for them” “able to speak my mind” “slow down and relax”.

#### **Intensity**

“dreams were many, vivid, strange, interesting and intense. Some of the early ones were exciting and full of daring, some were intensely sexual.” “intense itching” “intensity (the highs were higher and the lows were lower)”.

### **Unusual sense of responsibility**

“personally felt responsible for and also ‘took on ‘ the responsibility of changing the environment for the carers, the clients, the relatives. I felt an unbelievable responsibility to make our conditions of work, more caring, more Intelligent, more feeling.” “I accepted ‘that which was my responsibility but refused to take blame for that which was not my blame’... felt the wrath of my anger” “blamed others” “power vs powerlessness” “courageous, domineering, bit forceful and organised”

Grumpiness: “Feeling a bit grumpy, disgruntled. Critical.” “growing darkness in my mood” “Grumpy... Want to be left alone. Sinking feeling from head to stomach. Sinking feeling in my mind. As though things are not right with me and not right in my world. Want to cry but not weepy” “underlying negativity in my attitude”.

### **Hopelessness, despair and the sense of a struggle**

“strong sense that I must carry on, struggle on and that somehow I can push through all this” “I’m really struggling to keep going” “The question ‘will I ever recover?’ is a recurring one... certainty that I will never recover; I’ll never be well again. Hopelessness, despair and rage” “felt as though I was disintegrating” “a feeling of ‘I’ve done what I can’, ‘I have worked hard, tried my best, put in best effort with an immense struggle and I can’t go on, so I collapsed’. ‘What is done, is done’. ‘This is me laid bare, I’ve given everything I can, now it’s up to you, it’s up to you now’.” “really couldn’t do anything even when I had the time for it” “new depths of despair and exhaustion, feeling completely powerless... could not find the will or energy to get out of it” “unnerving to feel so out of control”.

### **Storms and sense of danger**

“like being pitched into a storm and being trapped and tossed about in it for almost two months”... “it was like I was in a boat in a sea storm, desperately trying to hold onto something solid (the mast of my identity? Health? Balance? Happiness? Hopefulness? Life?) whilst being flung about on the crashing waves.” “Dreams with themes of danger, death and violence.” “I’ve been in the eye of the storm: a calm, peaceful place where I was blissfully unaware of the approaching weather.” “fear of something bad happening”.

### **Desire for company/solitude**

“overwhelming urge to be on my own... wanted to escape and deal with my physical symptoms in the absence of company” “wanted to protect my space to be left alone”.

### **Mental confusion / exhaustion**

“a sort of deconstruction of mental structures, preconceived notions, mental patterns (haze feeling, inability to focus, speech not coming out right, aimless wandering, absent-mindedness etc.)”, “mental sort of paralysis or meltdown”. “severe lack of energy and concentration” “excessively tired and cold” “memory was fading at times and I lost track of conversations and forgot my spellings” “Extreme exhaustion and heaviness and requiring more sleep than usual” “slow, muddled and static” “had poor concentration and memory” “mental agitation”.

### **Mental detachment**

“sense of detachment... being behind a curtain... mental exhaustion and despair from having to deal with those for so long and not seeing any light at the end of the tunnel... no desire to contact anyone. as if all my energy was pulled back in from out there and with it I had a new sense of power; it felt as if by trying to connect with others I would just be scattering my energy and losing my strength.” “fully aware of my detached state” “Slight feeling of dizziness in the early days, with a sense of disconnectedness” “There has been some forgetfulness and detachment.” “state of INDIFFERENCE... Nothing mattered to me. Nothing was making me angry or upset.” “isolated, not loved, not connected” “indifferent”.

### **Anger and sadness**

“starting to feel resentful and angry about the remedy.” “Privately screaming in the car at other drivers so hard that I hurt my throat” “When they came the tears were a relief, but they didn’t seem to want to come: the rage seemed like a block to them.” “Emotions, detached, aloof, spaced out, on a bad trip, fragmented, disorientated, disorganised, massive creative fixit energy, busy achieved many things, then melancholy, sad, miserable, then angry. Emotions circled. The anger really upset me the most because it was so sudden, so violent, so intensive and explosive.” “the energy from which this came was relentless, heated, angry and rushing or explosive.” “anxiety and anger that’s been difficult to let go” “flared up at my boss” “extremely angry and irritated all month with an explosive temper... scream very loudly to let out the energy” “extreme irritability / fiery anger” “grief (babies)” “irritation and anger”.

### **Death and aging**

“Deep grief about recent and old deaths came up. Fear of death – of my husband dying, my sister (she broke her leg badly at the beginning of the proving), and the kittens.” “a sense of having aged physically”.

### **Unpleasant and/or vivid dreams**

“Cycle of Power in Birth, Collapse of Life, Blood as a symbol of suffering, Sexual act. Closing dream was a sexual act quite disturbing in that it was with an unable, unattractive passive male. I felt revolted by the act. Afterwards he cried tears of blood so I licked his eyes clean to help him feel better. I woke with a taste of blood/metallic taste in mouth.” “dreamt vividly of blood and life collapsing” “I dreamt of an immense struggle and supreme effort to deal with a situation followed by a collapse and exhaustion from effort.” “dreaming of grandmother and mother” “tense/fearful dream of catching a yellow snake” “vivid dreams, mostly about some form of struggle” “Dreams of little black spiders or lice eating my hair, dreams of chaos and transport” “dreams of travel, transport and holidays” “dreams of people from the past”.

### **Hair changes**

“my hair had actually become very thin at the front (and still is)” “hair grew thicker, longer and stronger, had been falling” “hair themes: baldness (men and babies), perms, afro, alopecia, hair regrowth”.

## **Head pain**

“constant, sharp, stabbing headache” “Headache, gunshot type pain, sudden intense, thick, dense deep pain, right temporal through to left, then moves through both occipital ridges through brain. Like a metal girder” “headache at back of head”.

## **Vertigo and circular symptoms**

great deal of vertigo, heat rising, a feeling of fireworks. “Vertigo, creeping circular swaying dizziness, cannot feel feet when walking feel very ungrounded, sensation of the fibonacci circular motion in and around me.” “a circling of symptoms. Beginning generally on the right upper outer cephalic, across my head to left outer then down caudally and around to the right, around to the back, across to my left knee and back up cephalic again. Then back around and up again.” “a lot of vertigo, headaches and throat issues all worse for menses and better for eating” “A growing sense of gas in my gut that moved in a circular motion”.

## **Heat with anger/frustration**

“Heat flushes, very intense, start at abdomen and work up fibonacci style one day, then next start in chest and circulate up, next day in throat and circulate up, then arms and just sweat sweat sweat. <<<night <<<emotions especially anger or frustration <thinking about them.”

## **Extremes of heat and cold**

“not able to eat spicy food at all” “pain felt cold and metallic” “I felt cold but there was a growing sense of heat” “warmer than usual” “burning pains in toes and feet” “coldness in lower extremities”

## **Colour red**

“I bought red boots having originally decided definitely not that colour!! Suddenly wearing red scarves, boots, whatever, very odd. Stood staring at a female beautiful full lush holly tree for 30 mins whilst out walking, because of the red berries, they were captivating” “Red+++ desire for” “red spots on face” “face felt flushed at the same time and I also felt panicky”.

## **Menstrual changes**

“Menopause has come in, menses gone, time will tell if for good. Here we are several months later and indeed no menses, hot flushes. But at the time a healing of Woman.” “Dramatic change in menstruation –from heavy one month to light the next month (and then back again)” “During menses in the second month the blood was so acidic the blood next to my skin caused burns and ulcerations. I couldn’t wear trousers for several days and had to use tampons not pads otherwise it was excruciating!”

## Respiratory changes

“breathing more easily and freely than normal” “breathing easily, less short of breath”  
Stomach: “increased appetite” “crumbling sensation as if things were falling apart inside my abdomen.” “urge to be sick or empty bowels” “discomfort was centred on my abdomen...better for looseness around the abdomen and being completely still.” “restlessness as part of the abdominal discomfort” “heaviness in my abdomen as if I was unable to hold my insides within.” “Desire for Fish (my freezer was full for 3 months!) and Salads”.

## Sharp pains

deeper pains in the joints and chest; sharp and heavy sensations. “Pain: Sharp, piercing, penetrative, negative, debilitating” “pulsating, radiating, cutting, boring pain. Better for pressure. Better for tensing my head”.

## Gemmotherapy

*I. aquifolium* is a remedy with complementary action, more effective when used in combination with other bud extracts, and dominates the hyper- $\alpha_2$ - $\beta$ -globulin syndrome. In the important group of bud extracts that have this property, of which *Vitis vinifera* is the main actor, also *Aesculus hippocastanum*, *Castanea vesca*, *Fraxinus excelsior*, *Ilex aquifolium*, *Prunus amygdalus*, *Quercus pedunculata*, *Robinia viscosa*, *Sambucus racemosa* and *Sequoia gigantea* are included. [Piterà, Piterà2]

**Distribution and phytosociology:** *Ilex aquifolium* grows in beech, fir-beech and oak-hornbeam forests, usually in the shrub layer, while when isolated it generally assumes an arboreal habit. It prefers medium light, well-drained soils, rich in nutrients, often decalcified and acidified, humid, at an altitude between 0 and 1400 m. Chorological type: Subatl. (Western Europe and even further east in the sub-oceanic climate areas), Submedit. (predominantly Mediterranean range). [Acta]

**Tropism:** This plant has a particular tropism for kidneys, adrenal glands, eye, ear, breast, lung, central nervous system. The young roots have a greater tropism for the skeletal and articular system. [Piterà, Piterà2]

**Action on coagulation and thromboelastogram:** slightly antithrombophilic. [Piterà, Piterà2]

**Lipid and lipoprotein metabolism:** it reduces  $\beta$  lipoproteins (Burstein test) and total cholesterol. [Piterà, Piterà2]

**Protein metabolism:** it slightly increases albumin; decreases  $\alpha_2$ - $\beta$ -globulins and the Cadmium test; reduces hyper- $\alpha_2$ - $\beta$ -euglobulins; it has an ambivalent action upon  $\gamma$ -globulins. [Piterà, Piterà2, Ledoux]

According to Ledoux, the phytoembryoextract of young holly shoots has two main poles of action:

- **Sclerosis:** often associated with the tree that protects it in the forest, the *beech*, it is an excellent remedy for sclerosis and is able to revive sclerotic tissues. It has three areas of preference: kidneys, breasts and lungs.

- **Ortho-parasympathetic imbalances:** Holly is associated with the notion of spasm; very effective in spastic nervous imbalances, especially in epilepsy, in which case it should be associated with linden [Ledoux, Andrienne, Henry]. In practice, this plant has unlocked and cured numerous cases of epilepsy, in introverted and nervous adolescents, of primary epilepsy, without a brain scar evident on the electroencephalogram. It calms intestinal spasms in nervous subjects. The young shoots contains the astringent information of the holly leaf. [Ledoux]

Its is febrifuge and hypotensive, too. [Ledoux]

*I. aquifolium* stimulates the adrenal performance, while **in the kidney** it improves the function compromised by chronic inflammatory processes, increasing the filtering capacity of the renal emunctorium. Pol Henry indicates it in renal failure due to nephroangiosclerosis, in association with *Fagus sylvatica*. [Henry, Piterà, Piterà2]

At the **ocular level** it has provided evidence to act in inflammatory forms of the eyes, and in ocular complications from rheumatic diseases. [Piterà, Piterà2]

It is useful in improving the **hearing function** compromised by hypoacusis phenomena due to tympanic sclerosis, and is indicated in tinnitus in synergy with *Sorbus domestica* e *Viburnum lantana*. [Piterà, Piterà2]

In the **nervous system** the young shoots act with properties similar to serotonin and as an ortho-sympathetic and para-sympathetic regulator, reducing nervous asthenia and neurodistonic states characterized by psychomotor alterations and visceral spasms. Pol Henry recommends its use in the treatment of epilepsy (petit mal) in association with *Tilia tomentosa*. [Henry, Piterà, Piterà2]

As regards its mammary tropism, it is indicated in fibroadenosis or fibrocystic mastopathy, as a complementary and synergistic remedy of *Alnus incana*, *Betula verrucosa* and *Rubus idaeus* (alternated or in association). [Henry, Piterà, Piterà2]

Finally, the **young roots** have a greater tropism for the skeletal and joint system, where they exhibit analgesic, anti-arthritic, joint and tendon anti-sclerosis properties, resolving arthro-tendon hardening and consolidating bone fractures. They have a diuretic action similarly to the young shoots of which they enhance the effectiveness in cases of oliguria and nephroangiosclerosis. [Piterà, Piterà2]

According to Ledoux, the phytoembryoextract of young holly shoots regulates the following three vibratory levels of man:

- on the mental (low density) level, it instills resistance and courage and helps to find energy in difficult moments of life;
- on the biological (medium density) level, it lowers  $\alpha_2$ - and  $\beta$ -euglobulins and  $\alpha_2$ - and  $\beta$ -globulins, and stimulates  $\gamma$ -globulins;
- on the physical (high density) level, it counteracts sclerosis and neurological spasms and of the digestive system [Ledoux].

## ***ILEX* SPECIES USED IN CHINESE MEDICINE**

*Mao Dong Qing* (毛冬青, Radix Ilicis Pubescentis) is the root of *Ilex pubescens* Hook et Arn. It belongs to the category “Herbs that Invigorate the Blood”, and has the following properties:

*Taste*: bitter, acrid, astringent [AmDragon]; bitter, astringent [ChinHerb]

*Temperature*: slightly cold, (neutral), (cold) [AmDragon]; neutral [ChinHerb]

*Entering Meridians*: Heart, Spleen, (Lung), (Liver) [AmDragon]; Heart [ChinHerb]

*Dosage*: 15-120g; Phlebitis: 500g; Tincture: 2-5ml. [AmDragon]; 30-120g (to 500g for phlebitis) [ChinHerb]

*Actions and indications*:

- *Invigorates the Blood and unblocks the channels and collaterals*: Heart Blood Stasis with chest pain and stroke with hemiplegia; Heart Qi Stagnation; Chest Bi.
- *Clears Heat, resolves toxicity and stops coughing*: Lung Heat cough; Wind-Heat cough; Swollen, painful throat; topically, as a powder for burns. [AmDragon]

*Mao Dong Qing* is antitussive, bacteriostatic, expectorant, hypotensive; it dilates coronary arteries and probably has antiviral properties. [ChinHerb]

It is used in Chinese Medicine to treat a variety of conditions: Wind-heat cough, common cold due to Wind-Heat, Lung Heat cough, swollen painful throat, tonsillitis, dysentery, coronary disease, myocardial infarction, vasculitis, erysipelas, central retinitis, uveitis, suppurative dermal disease, Buerger’s disease, angina pectoris, hypertension and thromboangitis obliterans. Topically it is used as a powder to treat burns. [AmDragon, ChinHerb]

It is an ingredient in the popular patent remedy Gan Mao Ling, a herbal medication used in the early stages of cold or flu. [ChinHerb]

This herb is not recommended for deficiency patients, and is contraindicated for those who tend to bleed. It must be used with caution for patients taking anticoagulants or antiplatelet drugs since concurrent use may have an additive or synergistic effect. [AmDragon]

*Dong Qing Ye* (冬青叶), also called *Si Ji Qing* or *Gong Lau Ye* (Folium Ilicis) is the leaf of *Ilex chinensis* Sams. It belongs to the category “Herbs that Clear Heat and Cool the Blood” [AmDragon] and has the following properties:

*Taste*: Bitter, Astringent [AmDragon, ChinHerbS]

*Temperature*: Cold [AmDragon]; slightly cold [ChinHerbS]

*Entering Meridians*: Lung, Heart [AmDragon, ChinHerbS]

*Dosage*: 10-30g [AmDragon]

*Actions and indications*:

- *Dispels Heat and Toxins from the Lungs and skin*: Bronchitis, pneumonia, chronic non-healing sores and ulcerations, burns and scalds, measles; *Chuang Yung*



- *Cools the Blood and stops bleeding* (topically): Bleeding [AmDragon]

In traditional Chinese medicine, it is used to clear heat and remove toxin, cool blood and stop bleeding, treat eczema, dermatitis, dysentery, biliary tract infection, urinary tract infection, angina pectoris, acute laryngopharyngitis, acute tracheobronchitis, burns and scalds, traumatic hemorrhage, cough due to lung heat, thromboangiitis obliterans, skin mucosal ulcer. [ChinHerbs, Xia]

## 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.)<sup>4</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>5</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

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<sup>4</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>5</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.

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 heat<sup>6</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>7</sup> which are manifested by the emission or collection of purulent material, often even hardened (e.g., abscesses)<sup>8</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>9</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”,

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

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

8 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.

9 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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