

VERDE SAPIENZA

QUARTERLY JOURNAL OF TRADITIONAL HERBALISM AND SCIENTIFIC RESEARCH

>> **ETHNOBOTANY,
PLANTS TO PREDICT
THE FUTURE**

The study of ethnobotanical heritage represents a very interesting and unique way to understand the culture of a given territory

>> **THE POWER OF
BIOACTIVE TEA
COMPOUNDS,
BEYOND INFUSION...**

>> **MUSHROOM OF THE FUTURE**
Adaptogenic Activity

>> **MICRODOSES**

>> **PHYSIOTHERAPY
GUARDIAN OF HEALTH**

THE AUTUMN TRIAD

VALERIAN, ROSE HIP AND FENNEL



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VERDE SAPIENZA

magazine

Call to Contributors

*We tell the story of the world of herbs in the
past, in the present and in the future.*

*We are looking for passionate and
knowledgeable voices: botanists, herbalists,
historians, growers, cooks, educators,
illustrators, researchers, and green
storytellers.*

*We seek articles, short essays, short
stories, interviews, reports, and projects
that combine rigor, ecological sensitivity,
empathy, and narrative skill.*

*If you'd like to contribute, please send us a
short presentation and a proposed article.
We cultivate and share this space dedicated
to the world that hosts us.*

Trees, living beings



Trees run through the history of humanity. They live in the pages of poets, in the shots of photographers, in the steps of walkers, in the adventures of the gods. From San Francisco to Sebastião Salgado, trees have always told the story of time, patience, and the silent strength of life.

Yet, millions of trees are cut down every year. The reasons are almost always the same: “they are sick”, “they are unsafe”, “the roots are too invasive”. Or they are given responsibilities that are rarely proven with independent data and expertise. Too often, it is fear, haste, or profit, rather than scientific evidence, that guide these decisions. For years, environmental associations have been denouncing this trend and trying to raise awareness among citizens and institutions. Every now and then, news arrives that reminds us that another path is possible. It happened in Terrasse-Vaudreuil, Quebec, where the city council unanimously passed a resolution recognizing trees as living beings with specific rights. The document states that trees have the right to live, grow, and regenerate, recognizing the irreplaceable role they play in quality of life. They purify the air, support biodiversity, mitigate heat islands in cities, absorb rainwater, and make communities more resilient in the face of climate change.

In an era marked by increasingly devastating wildfires, extreme weather events, and the continued loss of natural habitats, this decision represents much more than a symbolic act. It’s a change of perspective. It means recognizing that trees are not just street furniture, nor obstacles to remove when they become uncomfortable. They are living beings, protagonists of the ecological balances on which our existence also depends. Major transformations often begin in smaller places. From communities that choose to look beyond the emergency of the moment and build a new pact between man and the trees, between man and the Earth. The day we truly recognize the value of a tree, we will also recognize the value of our future.

VERDE SAPIENZA

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OPEN-DAY 11 october 2026

ACADEMY OF HERBAL ARTS

On Sunday, October 11 2026, from 10:00 a.m. to 6:00 p.m., the Academy of Herbal Arts will present its **Open Day at the Botanical Garden of Rome**, dedicating a day to plant culture, herbal tradition, education, and sharing.

The programme includes a journey through **experience and dissemination**, with a tasting of herbal teas at the Bancone delle Erbe, with the possibility of participating in herbal workshops and guided tours of the Orto dei Semplici.

Among the events, the presentation of the educational offer, the manual **“Cum Grano Salis: herbal culture in schools”** and **“Verde Sapienza”**, the new quarterly periodical published by AdAE.

The program is completed by a **workshop with liqueur tasting curated by Marco Sarandrea**, dedicated to the relationship between botany, tradition and culture of herbal preparations.

The Open Day is an opportunity to get to know the activities of the Academy up close and deepen the value of a wealth of knowledge that combines **science, tradition and plant culture**.

Botanical Garden of Roma

Largo Cristina di Svezia 23/A, Roma

www.accademiadelleartierboristiche.org



Valerian

Valeriana officinalis L.
Caprifoliaceae Family

BOTANY

Valerian loves humus-rich soils, moist, cool areas: it grows wild along the banks of streams and rivers.

The earth nourishes its root and lateral rhizomes, which appear abundant from its second year of age: in autumn the underground parts can be collected and dried, taking care to take small quantities and only in areas where the plant grows in abundance since, deprived of the root, it will not be able to grow back.

PARTS USED: roots and rhizomes

BALSAMIC TIME: autumn

HISTORY

The root of its botanical name comes from the Latin term *valere*, meaning to have courage, to be brave, healthy and strong. Its solid tradition of use, both ancient and modern, bears witness to the importance of this remedy, capable of restoring lost calm, providing rest, and calming the torments of the soul. Used in ancient Greece as an aphrodisiac, in Egypt as an antidote to snakebites, in Europe as an aid for insomnia caused by war trauma. The beneficial sedative power of valerian has been known to humans for centuries, but if a cat's refined sense of smell intercepts the aromatic compounds rich in its roots, an opposite effect will be observed: on these animals, valerian exerts a decidedly astonishing attraction.

THE THREE PLANTS OF AUTUMN

Marta Camilli

01 >>

VALERIAN

Sedative, Spasmolytic, Anxiolytic, for menopausal disorders, Hypotensive

02 >>

DOG ROSE

Astringent, Immunostimulant and immunomodulatory, Diuretic, Depurative, Draining, Hypoglycemic

03 >>

FENNEL

Carminative, Galactagogue, Aromatic. Diuretic, Digestive, Draining.

Dog Rose

Rosa canina L.
Rosaceae Family



BOTANY

The dog rose is the primordial form of multi-petaled ornamental roses: with the other enchanting flowers of the Rosaceae family (cherry, almond, peach) it shares the five petals, perfect in their delicacy, illuminated by the numerous central yellow stamens. This shrub, thorny like all roses, grows wild in grassy areas, in scrublands, on roadsides, from hills to mountains: the wild rose has no pretensions to being displayed, rich as it is in its silent and

powerful strength.

PARTS USED: leaves, petals and rose hips

BALSAMIC TIME: autumn (for the rose hips), spring (leaves and petals)

HISTORY

Autumn marks a turning point: from summer expansion that dilates time and space, we move to a slow retreat toward the depths, which accompanies us in search of the treasures hidden beneath the cold blanket of winter. The bright red of rose hips seems to promise that even when summer abundance disappears completely, we will still have gifts to seize, if we can recognize them. The astringent, tannin-rich leaves, the sweet scent of the petals, the tart flavor of the fruits: every part of the wild rose deserves a special ode. Omnipresent in ancient and modern recipe books, the rose is food, medicine, and cosmetics: a generous plant that speaks to the heart and can hold strength and lightness together.

Fennel

Foeniculum vulgare (Mill.)
Apiaceae Family

BOTANY

This herbaceous plant reaches up to 2 meters in height: the bluish green leaves, divided into capillary laciniae, appear low in spring and hide among the grass, ready to reveal their aroma to the most attentive noses. The grooved and robust stem grows quickly, and in summer the yellow-dotted flower umbels open. Each part of the plant has its own specific use, but if you wait for the placid summer to pass, the greatest gift appears: the fruits, commonly called seeds. A rich harvest will be available in a short time, and the supply will be enough for us for the entire season to come.



PARTS USED: leaves, flowers and fruits

BALSAMIC TIME: autumn (for the fruits) spring (for the leaves), summer (for the flowers)

HISTORY

The popular uses of fennel are numerous, as evidenced by the widespread presence of this plant among proverbs and sayings: the Italian expression 'infinocchiare' is a direct reference to the aromatic profile of this herb, capable of masking odors or flavors that would otherwise have indicated a poor state of preservation of the dishes offered. Less well-known, however, is the belief that snakes used to rub themselves on fennel to strip off their old skin and used its leaves to regain their sight, which weakened after hibernation: 'lumina clara facit' is the Latin saying, meaning it makes the eyes clear.

Certainly, in poor medicine, fennel fruits have always been a powerful ally of women, supporting them in the delicate moment of the puerperium thanks to their galactogenic properties.



*"All life on earth springs from
the green of plants"*

Jay Kordich

Rose Hip

Rosa Canina L.



ROSE HIP HONEY

Ingredients:

Fresh dog rose fruits (rosehips)

Procedure

Collect the rose hips before the frosts, wash and dry them, then open them with a small knife to remove and discard the internal achenes and hairs, then crush the remaining fruit in a mortar to obtain a creamy consistency. Weigh the product thus obtained and place it in a glass jar of the appropriate size, previously sterilized, then add double the amount of good quality honey, with a consistency liquid enough to allow it to be easily mixed with the rosehip paste. Close the jar and let the preparation rest for 15 days away from light and heat sources. This preparation allows you to store and use the active ingredients of rose hips without altering them, in particular vitamin C.

It can be consumed as is in cold weather to help the immune system (one/two teaspoons a day) or diluted in water or a warm herbal tea.

In case of colds or influenzas double the dose.

Fennel

Foeniculum vulgare Mill., 1768



Fennel seed facial toner

Ingredients:

Rose water 50 ml

Fennel seeds gr. 10

Liquid Honey 1 teaspoon

Procedure

Weigh the fennel seeds and pound them lightly in a mortar, then place them in a glass container of the appropriate size, previously sterilized; weigh the rose water and add it to the seeds along with the teaspoon of honey, mix well and let it rest for 24 hours. Strain and keep cool in a glass bottle, possibly dark glass. It is used on the face after cleansing with a toning and illuminating effect.



Valerian

Valeriana officinalis L.

ROOT DECOCTION

For soothing compresses:

Gently boil a tablespoon of dried Valerian roots in 250ml of water, over low heat and covered, for 10 minutes. Let it rest for 15 minutes, then filter and allow to cool.

This decoction allows the use of Valerian root, once known and appreciated by farmers, the only drawback is the smell, which is not exactly pleasant. It is effective on bruises, dermatitis and small wounds. Dip a clean gauze or cloth into the decoction and, after gently squeezing, apply to the part to be treated, often renewing the compress.



ETHNOBOTANY, plants to predict the future

Giovanni Salerno
Gisella Paccoi

Ethnobotany is an extremely complex discipline, examining the many ways in which humans used and still use the plants that grow alongside them.

Typically, the aspects that come to mind first when thinking about this science are those of phytoalimurgy (particularly to rediscover some wild herbs to include in our dishes), the healing properties and artisanal uses of certain species, but we must not forget the magical, playful and divinatory aspects, equally interesting and, in some ways, much more descriptive of the habits and values of a given human community. The desire to know the future is perhaps one of the most frequent drives of the human soul; in fact, ethnobotanical studies conducted on ancient texts have revealed that the habit of using plants for divinatory purposes dates back to ancient times and was so ingrained that it even had a name.

The ancient Greeks wrote questions or names on leaves (often olive or fig leaves, a practice called *sychomancy*) and exposed them to the wind. Responses were inferred based on which leaves flew away and which remained on the ground, or by reading the letters that remained visible on the surface. Another variation involved burning verbena or bramble branches: the way the fire burned and the direction of the smoke revealed the future.

In the Roman and medieval world, *chromniomancy* used plant bulbs, especially onions. During particular holidays, different names or possible answers were carved on several onions, which were then planted at the same time. The first onion to sprout indicated the exact answer or the name of the groom-to-be. An example that everyone knows – also used in recent times – is the one that leads us to browse daisies asking them if a certain person “loves me or loves me not”, and which shows that humans have not lost



Lolium Perenne L.

the “taste” of questioning plants to know their future.

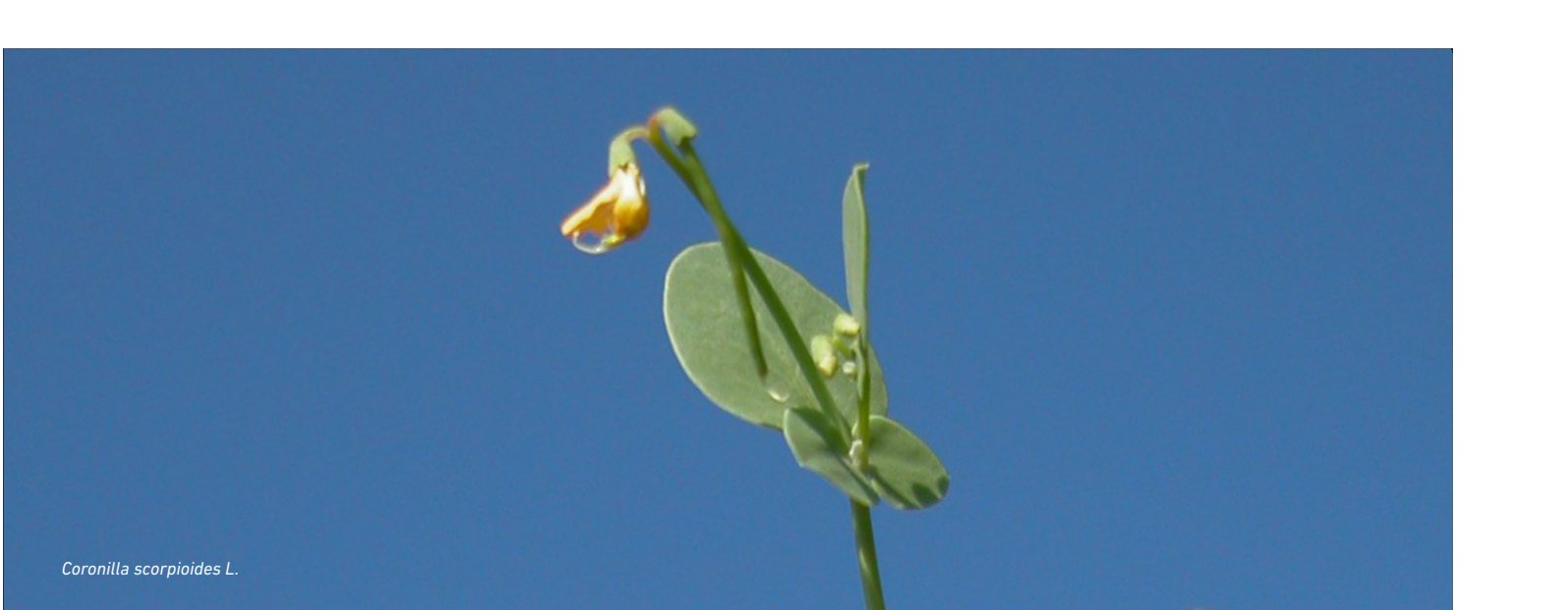
One of the two authors of this article is deeply involved in the Cilento community and has conducted in-depth ethnobotanical studies, which have led him to identify three plants that, according to ancient tradition, would have been able to reveal the future, sentimental and otherwise: *Sedum cepaea* (the so-called “èrva ll’ascenziòne”), the *Lolium* (in particular the perennial – called “jugliàta”) and the *Coronilla scorpioides* (called “èrva ròsa”).

The *Sedum cepaea* L. is a small succulent herbaceous plant, mainly annual or biennial, between 10 and 30 centimetres tall; in many places –not only in Cilento – it is called “Ascension herb” because it flowers around that time, that is, forty days after Easter.

In Castel San Lorenzo, the town in Cilento at the epicenter of the aforementioned study (published in the *Informatore Botanico Italiano* in 2008), the elongated stems of the *Sedum* were collected the day before, precisely, the Ascension, and placed in the house hanging upside down. If the next morning their tips had moved, pointing upwards, people were happy because they had received a good sign, a good omen not only for feelings but also for personal fortune. Something similar happened on the island of Elba:

women would get up at dawn to walk along the ditches or to the wetlands of the island in search of the plant, and would collect the stems still wet with dew (which, on that day, was thought to have magical and purifying powers). Once brought home, the plant was cleaned of earth and hung upside down. From that moment on, it became a true plant “oracle” for the family economy and health: if in the following days the sprigs continued to straighten upwards and come to flower, the omen for the family was excellent, because it indicated the arrival of a season with abundant harvests, health for loved ones and protection of the home.

The *Lolium perenne* L. (but also *temulentum* and *multiflorum*) has characteristic spikelets alternating along an axis (the so-called “couplet spike”). Curiously, this structure inspired both the inhabitants of Castel San Lorenzo and those in the Tyrrhenian sector of Basilicata (such as those of Maratea) to turn to them for a prediction about the future. The former associated with each spikelet, starting from the bottom, the following four elements: “bread, wine, *vunnnanzia* – that is, abundance – and famine”. The word that was pronounced in association with the last spikelet, the apical one, was intended to describe what the vintage would



Coronilla scorpioides L.

be like from the point of view of the main agricultural productions. Unveiling this kind of future was of enormous importance in a peasant society like the one in Castellana.

In Maratea, the divinatory property of this plant instead focused on another very specific aspect: love (or, as it is generally called in the southern sector of our peninsula, the "affection") reciprocated. The words, in this case, were "very, little, nothing". We started from the bottom, and the last remaining spikelet could quantify the feeling felt by the loved one.

The ***Coronilla scorpioides* L.** is a species that contains a substance, in the sap, that irritates the skin. It is no coincidence that the dialectal phytonym in various areas of southern Italy is "èrva rosa", precisely because of the redness it causes – despite its yellow flowers! To interrogate it, it was necessary to chop the leaves and apply the fragments to the forearm, pressing them for a certain time, to bring the juice into contact with the skin. Depending on the reaction the skin had – from simple redness to a bubble – one could discover whether love

was reciprocated, and how much. In Maratea, there was even a nursery rhyme that was pronounced during this operation: "èrva rosa, èrva rosa, sì me vò bène, fàmme 'na rosa; sì nun me vò bène fàmme 'na bùdda come 'na coccia di sarapùdda". This chant has a double meaning, because it mentions the "sarapùdda" which, presumably, is an ancient variety of wheat, the saragolla or sea buckthorn (*Triticum turgidum subsp. durum*) – taken as an example because the grain's casing resembles a small skin bubble. Curiously, the fact of using *Coronilla scorpioides* in various capacities as a "love quantifier" is present in many areas of Italy such as Abruzzo, the Marche and the Val di Chiana, in Tuscany, where it even takes the name of "love herb".

The one just presented is, as already mentioned, just one of the many fields of action of ethnobotany, which once again proves to be a science that can provide elements of great interest to other disciplines as well. In the next issues, we will continue to tell you little-known and curious aspects that emerged from these studies.

GREEN NANOTECHNOLOGY a future between revolutionary impact and unfulfilled promises

Part three

Marcello Nicoletti

We will use some keywords, within a logical sequence, such as perception, exploration, imagination, limitation, organization, evolution, application.

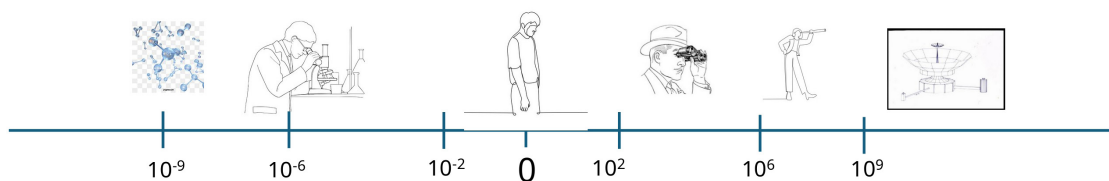
Whenever technological advances occur, there is a tendency to amplify their consequences. Sometimes there are actually historic changes, other times you have to wait for things to mature, other times, expectations evaporate without leaving a trace. Even now, there are some aspects of recent technological developments that are often portrayed as revolutions in progress, on which the

fundamental aspects of the world to come depend. To understand whether nanotechnologies will have a real possible impactful future, some determining factors must be taken into account.

Let's try to see all this with different eyes, beyond forced exaggerations. The proposed key to understanding is that no revolution is taking place, if anything an evolution. Just take into account that events determined by technological leaps have always been there and that all this is part of a typical path of the human race.

Homo sapiens is a dissatisfied

(Pic. n1)



being, incapable of being satisfied with what he has, for example the natural resources present where he dwells, and of accepting the limits of perceived reality. He's born a migrant, discoverer, conqueror, always in search of something he doesn't yet know. Every moment of his life consists of an inexhaustible desire to gain knowledge, to understand, to overcome. He preys on an inexhaustible need to go further, which arises from a conflict between what he perceives and what he imagines. All this derives from his peculiarities, which consist in the capacity for speculation and imagination. The senses convey to him the perception of the world around him, but something tells him that it is a deception, useful just to survive, but not to live fully. And so the brain reworks and tries to unveil the trick.

To visualize the concept let us think of a linear dimensional scale, the one determined by our natural visual abilities (but the same exercise also applies to the other senses), draw a line and put the center on zero (Pic. 1). The reality perceived in this way is located in a range between a centimeter and a few meters, say 10^{-2} and 10^2 m. Beyond this limitation we have difficulty focusing and understanding. But even within the range, nothing is as it seems, or rather, not everything is as it seems. Out of range the disaster is

total. The lights of the stars are quite similar to those of fireflies, but we know well that they are only apparently the same. The stars look like they are hanging over an expanse of the sky and there is no difference between stars and planets. The sun seems to move and the earth stands still. Yet sooner or later the deception is exposed. The trick is answered with another trick, and the solution is called technology.

Visual powers are amplified, on the one hand with the microscope and on the other with the telescope. The range widens from the micron of viruses to the size of stellar bodies. But even this is not enough for human exploration. Where you can't see, tools come into play that produce realities that didn't exist before. All this is the result of an extraordinary combination: the power of imagination, which logically creates what is to be discovered and senses where to find it, is automatically mingled with the new technological advances that provide the necessary new instrumentation.

Natural perception is artificially amplified and boundaries are gradually overcome, following a simple mathematical sequence, that is, if there is a world sized on 10^{-3} , there is also one of 10^{-6} , up to 10^{-9} , that is, the nano dimension.



THE POWER OF BIOACTIVE TEA COMPOUNDS, BEYOND INFUSION...

Curated by
A. Vitalone e L. Politano

The history of tea is rooted in over five thousand years of traditional medicine.

According to legend, the Chinese emperor Shen Nong discovered its properties by chance when some leaves of *Camellia sinensis* (L.) O. Kuntze fell into boiling water. Today, that same plant is at the center of growing scientific interest.

Tea is the second most consumed beverage in the world after water, with annual global consumption exceeding 6 billion kilos of dried leaves. *C. sinensis* belongs to the Theaceae family and is an evergreen shrub native to the "tea belt", which includes southwestern China, northern Laos, Vietnam, Myanmar, and northeastern India.

There are the *sinensis* varieties (small leaves) for green and white tea, and *assamica* (larger leaves) for black and pu-erh tea. Based on

the processing method of which the degree of enzymatic oxidation is the determining factor, the following are obtained: green tea, white tea, yellow tea, oolong tea, black tea and pu-erh tea. Fresh leaves contain approximately 25-32% polyphenols, mainly catechins such as epigallocatechin-3-gallate (EGCG), epigallocatechin, epicatechin-3-gallate, and epicatechin. EGCG is the most abundant catechin and is primarily responsible for the documented therapeutic effects.

Other bioactive compounds include L-theanine, an amino acid almost exclusive to tea leaves, and caffeine. In the phytocomplex, these compounds act synergistically: the amino acid balances the excitatory effects of caffeine, reducing the more well-known side effects such as anxiety and tachycardia. Caffeine improves concentration, producing so-called "relaxed alertness", a state of alert relaxation that represents the characteristic effect of tea. On the cardiovascular level, black tea inhibits angiotensin-converting enzymes, exerting an antihyper-



Camellia sinensis L.
oxidation

tensive and protective effect on the vascular endothelium, with a reduction in total cholesterol and the LDL/HDL ratio. On the metabolic level, green and yellow tea modulate adipogenesis through the suppression of transcriptional factors, with increased adiponectin and reduced visfatin, thus improving insulin sensitivity. Green tea produces skin photoprotective effects, neutralizing free radicals, inhibiting UV-induced metalloproteinases, and stimulating endogenous antioxidant enzymes. It shows antibacterial properties by hindering biofilm formation in the case of *S. mutans*, a typical cariogenic bacterium. Tea also has antiviral properties, in which catechins block the adsorption of influenza A/H1N1 virus and herpes simplex type 1. The most significant clinical translation is Veregen®, the first drug approved by the FDA in 2006 for the topical treatment of HPV-induced genital and perianal external condylomata acuminata, containing 15%

synecatechins. The pharmacokinetic limitations of tea polyphenols are driving research into nano-delivery systems such as nanoliposomes, nanoemulsions, chitosan nanoparticles, and Metal-Organic Frameworks (MOFs), which selectively degrade in neoplastic acidic microenvironments, releasing EGCG and doxorubicin, with antitumor efficacy in xenograft models. In parallel, standardized extracts based on 97% EGCG and 98% L-theanine are very popular in food supplements. For safety, EFSA has determined that 800 mg/day of EGCG may result in hepatotoxicity. Documented interactions of tea are plasma nadolol reduction, interference with rosuvastatin, atorvastatin, and INR decline with warfarin. Caution in pregnancy due to impact on folates. *C. sinensis* (L.) O. Kuntze can be considered not just a simple drink, but an extraordinary therapeutic resource whose full potential is still to be explored today.

PLANTS FOR DYEING

the chromatic imprint of a territory

Valeria Zannoni

In the age of industrial reproducibility, colour is reduced to an abstract code, to a synthetic powder devoid of memory.

We are used to thinking of color as a fixed data, encoded in its pantone: we purchase an industrial shade identical to itself in Rome, Paris or Tokyo, in January as in August. Chemical color is an act of imposing man on matter. In the past, dyeing with plants was the exact opposite: a complex ecological negotiation in which the craftsman had to come to terms with ecosystem responses across time, space, geology and the limits of nature.

Dyers had to first negotiate with the plant's life cycle. One could not be dye "on command". To

obtain alizarin from madder (*Rubia tinctorum* L.), it was necessary to wait for the plant to root in the soil for at least three years; the leaves of woad (*Isatis tinctoria* L.) had to be collected before flowering, when the concentration of indigo precursors was at its peak. Dyeing meant subjecting the time of economics to that of plant biology. The final colour then depended on the local geology imprinted in the water. Water flowing between limestones, rich in calcium and magnesium, reacts with phytocomplexes in the opposite way to water from a river flowing over granite. Dyers knew that the same bunch of herbs gave different shades depending on the location, and had to "bargain" with mineral hardness, changing the pH with vinegar or wood ash to convince the dye molecule to reveal itself.

Furthermore, plants do not produce pigments for human ae-

Extracting a pigment is a timeless ritual: it's the story of the world written in the colors of nature

sthetics. Flavonoids, tannins, and anthraquinones are secondary metabolites that the plant synthesizes as survival strategies against predators, parasites, or radiative stress. The dyer carried out a “biological hijacking”: he took the plant’s defense weapon – such as oak gall tannin– and used it as a chemical bridge to bind the color to the wool keratin, in a profound dialogue between plant physiology and animal protein structure.

Finally, there was the limit of matter. If modern industry consumes oil to produce tons of synthesis, ancient wool workers’ guilds had to contend with the carrying capacity of the land: harvesting too much madder meant destroying the resource for the next year.

The expansion of activity had to negotiate with the balance of woodland and pasture.

A finished woolen cloth was the millimetric synthesis of that year’s rain, the minerals of that mountain, and the dyer’s expertise.

Rediscovering this knowledge today means reclaiming an advanced form of “ecological literacy”. Experimenting with colour extraction allows us to decode the environment, recognizing the latent potential in bark or wild herbs along trails, to return to understanding nature rather than simply consuming it. Colour thus ceases to be a surface element and returns to being the biological, chemical and historical signature of a territory.

Isatis tinctoria L.



THIS AUTUMN I'm feeding on...

Elena Ambrosin

In autumn, plants offer humans the expression of summer: fruits, berries, oils, seeds, everything that will nourish them to face the winter cold. It's the great Gift before retreating into an atmosphere full of silence: the sun retreats from its summer splendor, the plants follow it. Man, on the other hand, is "overturned": he is called to express his will, to bring the solar bloom within and to blossom himself. It's the period of new beginnings, new projects that take shape and help overcome melancholy. We meet the autumnal equinox, Porta di Michele, which invites us to support true, good and just Thoughts, "kindled" by the warmth of the heart. Heart as an organ of Life: active, at the center of our body, a point of connection and balance between the neurosensory system and the metabolic system. Heart as a venous and arterial blood receptor, as an organ that expresses a Rhythm. As Nature dies, Man sustains the expression of his Life, of his Heart. The fruits that have stored the summer heat help man to illuminate his inner fire, to keep it alive throughout the cold period: the QUALITY of the heat of foods, herbal remedies, aromas will influence the process. The key: Vivifying the Heart

Cereals:

Eikorn: the oldest cultivated wheat variety. Connected to the Sun, it nourishes all organs, gi-

ving strength and balance. It has the nutritional qualities of wheat (19% protein, iron, manganese, phosphorus, magnesium), is very rich in neuroprotective antioxidants (lutein, vitamin E) and highly digestible. It's suitable for those suffering from gluten sensitivity due to its low starch and gluten content, particularly degradable by the intestinal bacterial flora (omega gliadins). It regulates mood tone thanks to tryptophan.

Barley: cereal associated with Mars, stimulates the strength of mind and body. It is used in cardiovascular diseases (contains tocotrienol, cholesterol-lowering agents). Highly digestible, it is anti-inflammatory, laxative, bronchiolitic and a stimulant of peripheral circulation thanks to mucilage, maltose and hordein. It is remineralizing for bones, hair and skin (contains calcium, phosphorus, magnesium, potassium, selenium, silicon, zinc).

Plants:

Olive: It is the sacred plant of Light in the winter darkness and Healing. In phytotherapy it is the plant of Strength and Deep Peace, of support to blood circulation and the heart. Its life-giving power is most expressed in the fruit oil, which ripens slowly in the summer heat: it regulates low-grade inflammation, protects the cardiovascular system and nervous system thanks to polyunsaturated fatty acids and antioxidants (oleuropein). In the



kitchen it goes well with labiates as in Genoese pesto.

Red vine: it gives us detoxifying grapes, with antitumor action, protective of venous circulation (proanthocyanidins). The seeds are used to make oil, an anti-inflammatory and antioxidant, for the treatment of varicose veins and water retention.

Essential oils:

Cinnamon bark: warms the Heart, stimulates creativity. Abates nervous hunger, tonic, digestive, antidepressant.

Carrot: soothing and antioxidant. It treats eczema, promotes liver and kidney detoxification. It's the "woman seed" because she takes us into the depths of the earth, into the consciousness of the physical-psychic-energetic body.

Myrtle: with fresh, woody, sweet notes it has balsamic, antiseptic and dermopurifying properties, for couperose and winter redness.

Bach Flower Holly: The Heart Balm. To heal the sense of separation from one's spiritual side. It awakens the sense of Union in New Light, allows us to recover the energies projected outside and "engaged" in hatred and je-

alousy, bringing them back within us.

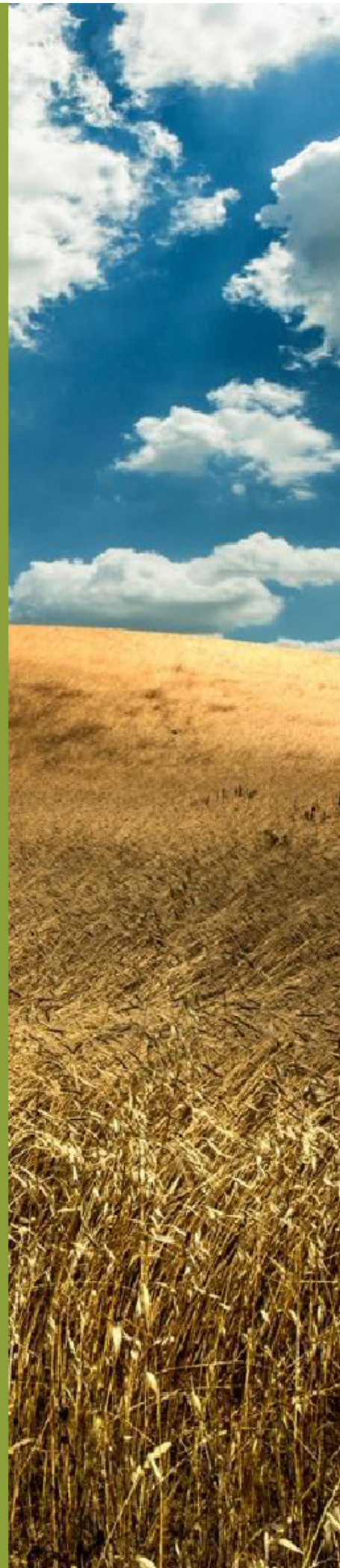
TREATMENTS TO APPLY ON THE SKIN AND FOR THE SKIN:

Purifying and nourishing face mask: : barley flour, extra virgin olive oil, red vine oil, carrot e.o., myrtle e.o.

Prepare 50 ml of half olive oil and half red vine oil, add 20 drops of carrot essential oil and 20 drops of myrtle essential oil. Add it slowly to the barley flour, just enough to obtain a soft batter (you will have some left over to reuse in the following days): the consistency must allow it to spread on the face (avoid the periocular area). Leave on 20 minutes. Rinse with water in slight circular motions to promote the scrub effect.

Body treatment for states of exhaustion: in 100 ml of olive oil dilute cinnamon bark e.o. 25 gtt., geranium bourbon e.o. 25 gtt., rosemary e.o. 25 gtt., thyme linalool e.o. 25 gtt. Rub onto the skin with the quantity suitable for the part (lumbar area, legs, arms) until absorbed. The preparation should be stored in a cool place away from light in dark glass.

*Nature turns towards slumber;
Humanity expresses itself with will.*



MUSHROOMS OF THE FUTURE

Annalisa Jannone

Adaptogenic activity of medicinal mushrooms - part one

One of the characteristics that make medicinal mushrooms special is their adaptogenic activity. To understand the profound meaning of this characteristic, it is useful to gain a systemic view of the organism. Biological systems are complex systems in which the multitude of elements of which they are composed are in continuous relation to each other. "Organizing relationships" are created to keep the system stable despite the constant change in external conditions. Compensation, transformation, feedback, self-control, signaling, and balancing mechanisms occur through continuous communication between elements.

In ecological terms, it is biodiversity that creates resilience because it allows for different modes of self-regulation and regeneration, having multiple possible pathways for transformation and compensation. Adaptive abilities in nature are the most important evolutionary survival mechanisms. Biological complex

systems are open systems as they continuously exchange matter, information, and energy with "the outside". But they are also closed systems as the organisation instead has to remain intact, with all self-regulatory systems intact.

To preserve the entirety of vital functions and the fullness of the flow of life, continuous physiological adaptations occur. The whole body participates in it and becomes the litmus test of the state of health. You adapt to changes without losing functions, structure, organization, and regenerative capacity. This organizational stability capable of responding to constant stress has an energy cost that is different for each of us. This is our health, our personal resilience.

Adjustment to stress

The stress mechanism is an adaptive mechanism that is the same for everyone; it is independent of the type of stressor. It is an essential internal biological automatism in a changing environment. This pressure on the organism requires adaptive energy:



Lentinula edodes
Shiitake

energy expenditure to support the resilience of the system. The organism, under stress, directs energy where it is most useful for survival at the expense of other “less vital” functions.

This life-saving setup, which still allows us to have a good quality of life in the presence of prolonged stressful situations, wears down energy reserves over time. Hyper-expressed cortisol erodes energy from compartments not useful for fight-or-flight,

to distribute them strategically for survival. Thus, over time, a chronic, pro-inflammatory stress circuit is established, a degenerative adaptive structure: the system settles where it manages to maintain constant vital functions but increases oxidation, inflammation, and blood sugar levels, and functions such as the birth of new neurons, memory, regeneration of cells and tissues, feeling safe and calm, quality of sleep, reproductive function, the

immune system, and others deemed unnecessary by the system in times of danger. Following chronic stress, cellular oxidative stress, and chronic inflammation, anxiety, obesity, diabetes, depression, memory loss, and the ability to concentrate manifest, which may be accompanied by endocrine and immune decompensations and therefore increased susceptibility to infections. In general, one is more vulnerable, tired, unmotivated, impulsive and inclined to automatism.

Anti-stress medicinal mushrooms, for performance and longevity

Medicinal mushrooms are remedies selected over millennia from traditional and popular medicines for their characteristic adaptogenic activity. They are used to support the body during stress, prolonged stress, inflammatory settings, depletion of adaptive resources, and for longevity. At the physiological level, they protect tissues and cells, stabilize regulatory and self-control mechanisms, and improve organ function during periods of emotional, physical, mental, and

energy overload.

In any case, they improve the efficiency of the system because they regulate the network by simultaneously influencing multiple nodes in the network, being made up of many bioactive molecules. They are therefore tonics that are also useful for those seeking the best performance such as athletes, artists, concert performers, professionals, students.

The maintenance of Rhythm

The physiological basis for health and stress resistance depends greatly on the ability to cultivate one's own rhythms, the circadian one of sleep-wake, the one of rest-work, and quiet-movement. Medicinal mushrooms can modulate and normalize daily hormone secretion curves consistent with physiological biorhythm. Thus, the body can restore, for example, the cortisol-melatonin alternation and from this, by entrainment, promote the correct secretion curves of other hormones and signal molecules.

They also improve intracellular cortisol receptor sensitivity by restoring feedback control me-

Cordyceps





Ophiocordyceps sinensis, known in Italy as *Cordyceps sinensis* and in China as *yartsa gunbu*. From National Geographic Italy

chanisms and hormone normalization.

Mycotherapy also supports the circadian sympathetic-parasympathetic rhythm with a marked improvement in daily vitality and the quality of night's rest. Fundamental functions are linked to this, such as the alternation of the catabolic and daily detoxifying phases, which alternates with the nocturnal restorative phase typical of tissue remodeling.

Medicinal mushrooms improve this rhythm with benefits for the whole body. And they do this by simultaneously acting on the regulatory, metabolic, energetic, epigenetic, nutritional aspects.

In the part two of the article, in the January 2027 issue, we will discuss the adaptogenic activity of mycotherapy from a biochemical, neurological, behavioural, and evolutionary perspective.

The physiological foundation for health and stress resilience depends heavily on the ability to cultivate one's own rhythms.

MICRODOSES

Marcella Saponaro

"What determines whether something is a medicine or a poison is the dose..."

Paracelso

Can a drug be used in minimal doses, achieving the same desired therapeutic effect?

Research by Mexican physician Dr. Eugenio Martinez shows that this is possible, supported by the now twenty-year clinical experience of thousands of doctors in Latin America. In my book "Microdoses" published by Mo-oxi Gruppo editoriale, I closely outline the technical and clinical aspects of this research, which opens up an interesting scenario in the medical field and in the very concept of pharmacological dosing. Microdoses are weight dilutions of therapeutic remedies (drugs, fresh plant mother tinctures, essential oils), which also reduce the usual doses used by up to 1000 times. They achieve the same therapeutic results but are free of the usual side effects; furthermore, they do not produce any dependence.

Preparation is very simple, low cost and does not require any special tools. It is, for all intents and purposes, a galenic preparation, which pharmacists can prepare on medical prescription.

They are not homeopathic (we are above Avogadro's 0), either due to the presence of the active ingredient, the lack of the diagnostic criterion of the similar, or the lack of succussions. If the patient is allergic to the drug, he or she will also be allergic to his or her Microdose. Martinez's technique, with its excellent clinical results, shows that there is a minimal effective dose, capable of achieving stimulation of specific receptors, beyond which it is useless, if not downright harmful.

MECHANISM OF ACTION

For these remedies, the mechanism of action of the Short Pathway, which uses the neuroen-

docrine system (consisting of the hypothalamic-pituitary-adrenal axis or IPS and the hypothalamic-pituitary-gonadal axis or IPG), is assumed to be valid. The hypothalamus is a fundamental component of the axis and an important sorting center: it integrates information about the internal state of the body, emotions, and environmental stimuli, then converts them into hormonal signals, which serve to maintain a state of organ homeostasis. The main CNS nucleus involved in the regulation of the neuroendocrine axis is the paraventricular hypothalamic (NPV) axis. NPV neurons represent the final component of a specific linker neuronal network. Many laboratory findings suggest that chemical stimuli applied to the oral cavity can modulate the function of the hypothalamus and autonomic nervous system. This is important if we want to understand the likely mechanism of action of microdoses, since their preferred route of administration is the supralingual one.

The anatomical basis is given by the neural connectivities existing between the oropharynx and the autonomic nervous system. Innervation of the tongue and oropharynx comes from three cranial nerves: the facial nerve (VII), the glossopharyngeal nerve (IX), and the vagus nerve (X). Afferent fibers reach the medulla and terminate in the ipsilateral solitary nucleus.

All this supports the possibility

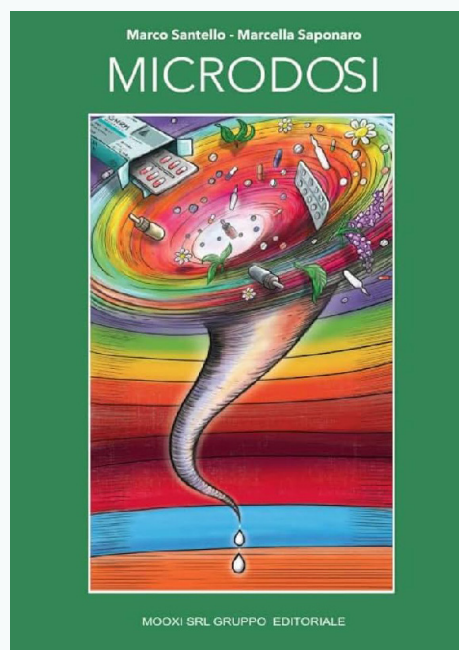
that small amounts of microdoses applied supralingually can activate the neuroendocrine system and reach target organs through hypothalamic NPV.

MICRODOSES

the future of pharmacopoeia?

By searching the publications of the various accredited scientific journals, we can already find various experiments and clinical experiences carried out with pharmaceutical microdoses, almost as if to demonstrate a growing trend or intuition pointing in this direction. Just think of the gradual reduction of the estrogen quota in the contraceptive pill or the use of small doses of estrogen during menopause (see Prestwood KM and coll., JAMA August 2003).

The publications found do not properly refer to Dr. Martinez's dilutions (although the doses are far lower than those usually used, 10 to 100 times lower). But this is, in any case, an important signal



for research on Microdoses. Interesting, for example, is the treatment of diabetic ketoacidosis with very low doses of insulin (Vanelli and Chiarelli, 2003) or ovarian hyperstimulation with very low doses of GnRH (Navot and colleagues, 1991 and Scott and colleagues, 1993).

ADVANTAGES

The application of Microdoses could make a significant contribution to the reduction of numerous iatrogenic diseases, to better management of long-term care or in socially difficult situations (think of the healthcare commitment in Third World countries). In addition to a reduction in healthcare costs, there can also be better management of the effects of drug dependence. In Latin America, clinical results are so significant that thousands of doctors now use them in various public facilities, with various applications (painkillers, antibiotics, psychotropic drugs, anti-inflammatories, etc.).

In the phytotherapeutic field, the depletion and massive use of various species can be prevented, but above all, the scenario of an increasingly widespread oral use of essential oils opens up (so far viewed with great caution).

In microdoses, the essential oils used never showed side effects. Interesting clinical results I have observed with some antibiotic oils (e.g. Origano Hirtum and Timo Timolo, which possess a broad spectrum of action on candidiasis, respiratory problems, viral diseases, bacterial infections) or anti-inflammatories (e.g. Achillea, excellent in the gynecological field for ovarian cysts, leukorrhea, dysmenorrhea). The use of Blue Chamomile in allergic dermatitis or Basil in mild depressive states or Melissa 100% for anxious states and somatizations or Verbena odorosa 100% to give good mood and mental clarity is really good.

RESEARCH PERSPECTIVES

Based on what has been said, in-depth research on the topic of Microdoses, with the appropriate organs and instruments, would be desirable.

It is a commitment that would bring us ever closer to a higher quality of care, as well as to that oath that is still dear to us:

"Primum non nocere"



THE VEGETABLE ORCHESTRA

Alida Mazzaro

Plants heal, nourish, infuse harmony and beauty, diffuse scents that accompany the rhythm of the seasons and are also music.

The Vegetable Orchestra, also known by its German name Das Erste Wiener Gemüseorchester, is a musical collective founded in Vienna a few years ago, known for having created a completely original artistic language. Its uniqueness lies in the use of musical instruments made exclusively from fresh vegetables transformed into authentic means of expression. Before each performance, musicians stock up at the markets of the city hosting their concert, carefully selecting fresh, quality vegetables. Each vegetable is carved, shaped and assembled to give life to the instruments, so as to preserve their acoustic characteristics and ensure the best sound rendering. Among the most original creations are the cucumberphones, wind instruments made from cucumbers, courgettes, carrots

and peppers, flanked by carrot flutes, eggplant castanets and pumpkins transformed into percussion instruments. Each plant element has its own voice, unrepeatable and destined to change as the hours pass.

The whole project is also founded on the principle of "zero waste". At the end of the concert, the vegetables no longer usable as tools are recovered to prepare a large minestrone shared with the audience or destined for composting, in a gesture that combines art, sharing, and respect for the environment. The orchestra captures the most imperceptible sounds of plant matter: the rustling of leek leaves, the slight crackling of fibers, the tapping of pumpkin peels, or the puffing that passes through a hollowed-out carrot. The repertoire embraces free jazz, experimental electronic music, techno and avant-garde contemporary music, resulting in compositions rich in timbral research and innovation.

PHYSIOTHERAPY GUARDIAN OF HEALTH (or of the botanical heritage?)

Marco Sarandrea interviewed by Annalisa Jannone

We interviewed Marco Sarandrea, an important phytopreparator in central Italy, who has been spreading and enriching the value of our botanical heritage for decades.

«What phytotherapy concepts do you think are important to convey in this phase of great simplification of knowledge, standardization of behaviours, and market globalization?»

Sarandrea: «Phytotherapy is an opportunity to return to our origins, to the tradition of knowledge which, using the words of Jean Valnet "... has such a remote use that it cannot find the beginning and, for now, one cannot imagine the end.

Since the post-war period, great phytotherapists, just like Valnet, have established the new canons of phytotherapy, enriching it with new knowledge, thanks also to

the study of ethnobotany.

The plant is seen as an intelligent system that produces different effects. All the variability of the steps in the production of phytotherapeutic remedies, the type of soil in which the plant grows, the climate, the traditional local use, the transformation methods, the ability to observe their effects, contribute to making them personalized experiences of caring for themselves and their community.»

«What influence does globalization have on herbal medicine culture?»

Sarandrea: «Modern commercial phytotherapy, linked to large-scale distribution, aims at a therapeutic intervention with defined patterns: high-titer dry extracts of the active ingredient, maximum standardization. An imitation of conventional, allopathic, ponderal pharmaceuticals.

The active ingredients are mostly added later, often of synthetic origin, with a very high titer. This use exposes to a wider range of toxicities, side effects and drug interference. More than anything, it contributes to making us forget the experience of care that human beings, through traditional phytotherapy, have expressed as superior wisdom from empirical exercise.

Traditional phytotherapy makes use of all the healing potential of the entire phytocomplex. The *planta tota* develops natural synergies. The resulting action is less violent, more prolonged, more complete, better tolerated than the single high-titer active ingredient.»

Marco Sarandrea has countless examples of how the whole plant makes the action of the phytotherapeutic more complete than the single molecule:

«... for example, the action of milk thistle compared to capsules ti-

trated in silymarin is not superimposable. It is not only a question of completeness but also of safety, for example to cushion the toxicity of the concentrated active substance it is better to use horse chestnut than escin.

Or again, alkaloid substances, such as caffeine and theine, would be toxic if coffee and tea were taken alone, but they greatly reduce the toxicological, sometimes even deadly, vehemence of alkaloids.

Today there is an immoderate rush to the new standardized phytotherapy with a high concentration of single substances. These formulations are mostly marketed in capsules after the "heavy" sophistications.

The desire to simplify, to make the remedy more powerful to resemble the drug, is an act of delegation to the industry, an impoverishment of the treatment path, a loss of that "knowledge" that has accompanied humanity to this day.»

Marco Sarandrea



«How important is the ability to personalize the intake of remedies?»

Sarandrea: «Traditional herbalism uses different forms of herbal products, which allow for diversified effects.

Mixtures are personalized on the individual at that precise moment and adapted as and when needs arise along the way.

I want to emphasize the importance of the act of preparing the medicine. Undertaking that ritual is the beginning of the treatment itself, time gained for listening to oneself: you are preparing your remedy, waiting for the transfer of substances to water, temperature, color, fragrance, aroma in the various steps of preparation is already a predisposition to take your medicine, an openness to integrate substances and energies from nature.

Herbal teas, infusions, and decoctions belong to the class of hydrolytes, the best known, but also mother tinctures, gemmoderivatives, syrups, powders, ointments, compresses, and many other ancient and current methods constitute the rich variety of ways to absorb plant power.»

ditional herbal medicine?»

Sarandrea: «The idea of a return to the origins, to the knowledge passed down, can be suggestive. We currently see more and more people bringing their thermos with them and sipping herbal teas and decoctions prepared perhaps the night before throughout the day, without any particular sacrifices. A gesture that accompanies us throughout the day and reminds us to pay attention to ourselves by staying hydrated, replenished with mineral salts and simultaneously supported by substances specific to the desired physiological functions.

It's all about the quality of the plants available. Old plants, often processing waste, plant parts without active ingredients crowd the market and undermine phytotherapy's reputation for effectiveness. Instead, plants grown or harvested, carefully dried, or otherwise prepared to high quality standards are quick to provide beneficial effects and relieve discomfort.»

«How does herbal medicine support health compared to other treatments?»

«What can be the strength of tra-

Sarandrea: «Phytotherapy is

*Matricaria
chamomilla L.*





"Autumn is a second spring, where every leaf is a flower."

Albert Camus

a medicine, so-called, of "terrain" like homeopathy and to be productive, it must follow confirmed procedures and criteria. For example, you must first prepare the body, purify it, to make it more receptive. Many plants lend themselves to the drainage action of the excretory organs so that the organism can then absorb the maximum synergy of the active molecules. By observing the signs and symptoms, the expert herbalist composes the mixtures, recommends the remedy. He knows how to distinguish a quality preparation and ensure a higher quality supply chain. Have you ever smelled good chamomile tea? You immediately realize that perhaps we have never had such an intense, nuanced scent on our hands, already healing in itself. What we normally find in sachets is probably not even the active part of the plant.»

«What do you most care about communicating to spread and protect this ancient cultural heritage?»

Sarandrea: «As you frequent the plants you begin to recognize the ones that are most beneficial to

yourself and you begin to plant them in pots, on balconies or in the garden, to always have some available. Curiosities and the desire to delve deeper are born. Historical, anthropological, botanical, energetic characteristics.

We are seeing a proliferation of plant training courses, recognition days, preparation, cooking, and transformation experiences to bring them ever closer to us in our daily practice. Curiosity and the desire to frequent them are growing, and the need to make medicated water, oleolites, toothpastes, and deodorants is reborn.

Driven by the need to defend themselves from the market and the satisfaction of artisanal DIY.»

Marco Sarandrea is one of those professionals who promote and enrich the culture of herbalization, that is, of narrating the life and miracles of plants in the field to talk about a thousand things, infinite different insights that tell of the relationship between us and plants.

At the end of the interview, he recommends Alfredo Cattabiani's book, *Floralio*, a milestone in botany, to further marvel at what surrounds us...

THE WATER HYACINTH START-UP

Natalina Nannarone

**No plant is to be despised, not even the most problematic:
The water hyacinth**

Pontederia crassipes Mart., could well appear in the list of plants that have domesticated humans. Journalist and popularizer Michael Pollan, in his book *The Botany of Desire*, chooses four well-known plant species to tell us how they were able to use human intervention to reproduce and spread, inviting us to observe the evolutionary behavior of plants from an extraordinary perspective. The water hyacinth is native to the Amazon basin, where it is the main food source for the Amazon manatee, of the walrus family, and where it finds its natural habitat floating on waterways in clumps of glossy, rounded leaves, which in spring display a spike of showy blue-purple flowers, spotted with yellow. It reproduces quickly, can double its mass every ten days and its roots purify the waters by extracting organic matter. Beautiful, useful, easy. How could it not be exported all over the world to decorate ponds, lakes and rivers? But by not finding, where it was released, herbivores to eat it or parasites, it ended up becoming one of the most invasive and dangerous alien species in the world. In many areas, it completely covers the surface of waterways, impeding navigation and literally suffocating fish, thus damaging related economic activities. In the US, it has earned the nickname "the million-dollar weed" for the financial commitment required by chemical and biological control in an

unsuccessful attempt to eradicate it. In Italy, too, it is widespread in several regions and is now invasive in Lazio and Sicily and Sardinia. The solution? It was conceived in one of the areas plagued by environmental degradation and economic problems of local communities, exacerbated by the presence of water hyacinth, and has already received a considerable number of awards and recognitions. A few years ago, a group of civil engineering students, during a boat trip on Lake Naivasha in Kenya, were stranded for over five hours by the most beautiful invasive plant in the world. Among them, the only one who did not get nervous was Joseph Nguthiru who, intrigued by the phenomenon, began to rethink the problem in terms of a solution, focusing on its positive aspects. Hyacinth grows easily and quickly, without requiring agricultural land that would put it in competition with food production, couldn't it provide a resource? So Joseph collects the plant, dries it out, analyzes it, extracts the cellulose from it, and finds the formula to transform it into a plastic-like material: a bioplastic with which to make biodegradable and compostable packaging. In 2022, together with other engineers, designers, and researchers, he founded the startup HyaPak, which currently processes one ton of water hyacinth per month and produces four thousand pieces of packaging, including seedling bags, courier bags, and food packaging liners. Eight hectares of Lake Naivasha's surface have been cleared and dozens of jobs have been created for young people and women, who collect and dry hyacinth. An example of a circular economy, which solves an environmental problem and limits the consumption of traditional plastic, which we are desperately trying to get rid of.

THE AIR FACTORY

**The alchemical laboratory
of the third millennium**

Natalina Nannarone

Plant intelligence is the paradigm that inspires “La Fabbrica dell’aria” (The Air Factory) and the one who conceived the idea could only be him, Stefano Mancuso, the neurobiologist who pioneered the discoveries made in the last twenty years on the behavior of plants. In 2005, Mancuso founded the international plant neurobiology laboratory LINV, launching a challenge to the international scientific community that paved the way for a new interpretation of the manifestations of the plant world. Since 2022, he has co-founded PNAT, Project Nature, a spin-off of the University of Florence, a team of scientists and designers who use plants to create real-world innovations. On their website pnat.net they state: We promote reconnection with nature, putting the individual at the center. Our projects transform ideas into products, systems, or spaces that harness the benefits plants bring to our health and lifestyle.

The Fabbrica dell’aria carries out these purposes: it is a botanical system designed to purify the air indoors and promote human well-being. It uses advanced technolo-

gies and design to enhance the natural ability of plants to filter air impurities, applying it to the indoor spaces where we spend much of our lives, often polluted by harmful volatile organic compounds released by electronic devices, building materials, furniture, and cleaning products. The system combines automated irrigation, fans, specialized lighting, and environmental monitoring sensors to distribute air drawn from the environment into the plant growth substrate, where pollutants are trapped by soil particles to allow microbial flora, in synergy with plant roots, to initiate the degradation of harmful molecules. The air is returned to the purified and filtered environment, at comfort temperature. The special modular box, which houses the system, includes plants with large leaf surfaces, such as Ficus, Kentia, Strelitzia or Filodendrum, and climbers such as Cissus and Tetrastigma.

The result is a breathing, self-sufficient, and beautiful biomachine, a new model of collaboration with plants that offers a glimpse of an ever-closer future of solutions to nature-based human challenges.



Nature FriendMail

Today i will not answer any question.
Today I will be the one to ask.

**My name is Oli, diminutive of Olive.
You all know me.**

I am the wise, the peacemaker, the one who listens without judgment and gives himself with all his heart. I always have done. And I keep doing it. But today I'm in trouble.

I'm not alone. All my tree friends, my herb friends, the woods, the meadows, the mountains are experiencing the same toil.

We lack water.

We lack air.

There's too much fire.

There are collapsed nests, frightened squirrels, animals on the run.

There is anguish. Anguish. Anguish.

That is why today, on behalf of all the green inhabitants, those with wings, those with four legs, with gills, with claws, of all living beings, we ask you a question: humans, what is your goal in life?

As you think, I'll suggest the answer: "Make life your only goal" Love it. Guard it.

Because every life is part of yours. Because it is the lack of care, love, and



respect that makes the body sick, that obscures thoughts, that extinguishes hope, that nourishes pain.

Remember: the responsibility belongs to each of you.

When you hurt a tree, a forest, an animal, a river, you are also hurting yourself. Because we are one breath.

We are life that sustains other life.

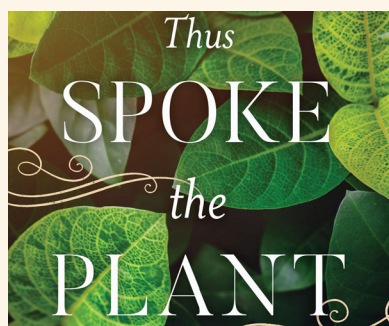
Let us never forget that.

EVENTS, COURSES, RECOMMENDED BOOKS

Thus Spoke the Plant: A Remarkable Journey of Groundbreaking Scientific Discoveries and Personal Encounters with Plants

Author Monica Gagliano

Ed. North Atlantic Books



Monica Gagliano is a scientist, biologist, and ecologist, internationally known for her research on plant communication and behavior. In this book –published in 2022 and always highly topical – the author recounts how, over the course of her career, she began to question some of the boundaries that traditionally separate science from other forms of knowledge. Alongside the narratives of laboratory experiments, her encounters with indigenous peoples, with people who live a profound relationship with nature and who consider plants not as objects, but as beings with which to connect, find space. Gagliano does not propose replacing science with spirituality, but invites us to ask ourselves whether the scientific method alone is sufficient to understand the full complexity of the living world. As we read, studies emerge that demonstrate how plants are capable of perceiving what

is happening around them, communicating through chemical signals, adapting to the environment and even to retain a form of memory of lived experiences. It means recognizing that intelligence can take very different forms than we are used to. This passionate book doesn't offer definitive truths, but it does open questions because, as you read it, you realize that the real protagonist is not just the plant world, but the way we look at it.

How capable are we really of observing our surroundings? How accustomed has our culture been to considering plants as simple resources to use? And what would change if we learned to feel part of the same web of life? Even when she addresses scientific topics, Monica Gagliano narrates in accessible language, alternating explanations, autobiographical episodes and personal reflections. In conclusion, "Thus spoke the plant" is a book worth reading and re-reading, because it not only talks about botany, but above all about relationships: between humans and nature, between knowledge and listening, between what we know and what we can still learn. It's a stimulus to look at plants not as a silent backdrop to our existence, but as traveling companions with whom we share the planet.

EVENTS, COURSES, RECOMMENDED BOOKS

PIANETA TERRA FESTIVAL (PLANET EARTH FESTIVAL) 8-11 OCTOBER 2026 -LUCCA-

It is an event for all those who want to explore this extraordinary common home of ours and reflect on ways to preserve and sustainably inhabit it. It is a multidisciplinary event: ecosystems, climate, new economic models, agriculture, food, urban development, and new political, social, philosophical, anthropological, and artistic visions will be explored.

The festival, directed by Stefano Mancuso, will take place from Thursday, October 8th to Sunday, October 11th, 2026, in the most evocative locations in the city of Lucca: the Church of San Francesco, the Doge's Palace, the Botanical Garden, the Auditorium del Suffragio, and the Agorà

library. Over 90 events over four days to be spent with scientists, philosophers, psychoanalysts, economists, geopolitical experts, writers, journalists and artists to investigate the fragilities of our time.

Unstable systems is the theme of this fourth edition: global warming, extreme weather phenomena, the transformation of landscapes, the energy issue, political, geopolitical, economic and even existential instability.

Pianeta Terra Festival meetings are free to attend while seats last..

Pianeta Terra Festival

planetaterrafestival.it

info@planetaterrafestival.it





The Botanical Garden of Rome opens its doors to the Academy of Herbal Arts

A day dedicated to plant culture, herbal tradition, and education.

This is the program of the **Open Day of the Academy of Herbal Arts**, scheduled for Sunday, October 11, 2026 in the evocative setting of the **Botanical Garden of Rome**.

The initiative was created to introduce the Academy to the public, its new educational offering, and the people who drive its activities: teachers, staff, and students. The Academy will also present several industry organizations with which it collaborates and shares a path to enhancing knowledge of the plant world.

Throughout the day, it will be possible to participate in **workshops, guided tours and tastings** as well as moments of meeting and discussion with the teachers. An opportunity to learn more about the school's activities and delve deeper into the various aspects of the herbal tradition.

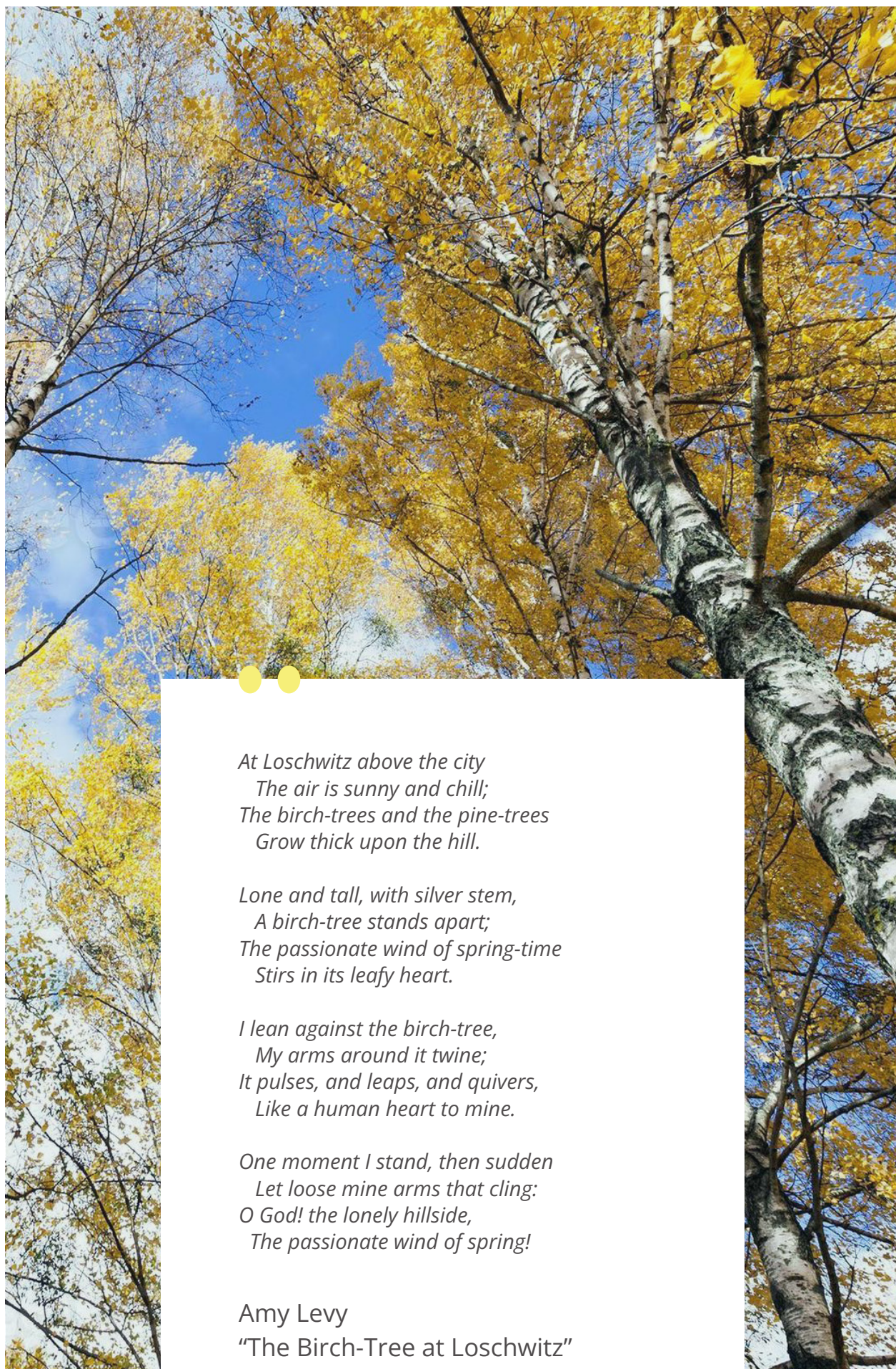
At the heart of the meeting will be the relationship between **plant knowledge, prevention, well-being, and lifestyle awareness**. An approach that starts from the herbal tradition to develop greater attention to the relationship between person, environment and plant heritage.

The Academy of Herbal Arts aims to be a **place for the formation, dissemination, and transmission of knowledge**, with the aim of fostering a more conscious understanding of plants and their role in culture and daily life.

The Open Day will also be a time for people who share an interest in the plant world and a desire to deepen their relationship with the environment around us.

Open Day of the Academy of Herbal Arts
Sunday 11 October 2026 | 10.00 a.m.–18.00 p.m.
Botanical Garden of Rome
Largo Cristina di Svezia 23/A, Roma





*At Loschwitz above the city
The air is sunny and chill;
The birch-trees and the pine-trees
Grow thick upon the hill.*

*Lone and tall, with silver stem,
A birch-tree stands apart;
The passionate wind of spring-time
Stirs in its leafy heart.*

*I lean against the birch-tree,
My arms around it twine;
It pulses, and leaps, and quivers,
Like a human heart to mine.*

*One moment I stand, then sudden
Let loose mine arms that cling:
O God! the lonely hillside,
The passionate wind of spring!*

Amy Levy
"The Birch-Tree at Loschwitz"

Dittrichia viscosa (L.) Greuter

Natalina Nannarone

Plants that grow along pavements, at roadsides, or in cracks in walls, in close contact with humans and labeled as weeds, are actually the heroic vagabonds of the plant world. Strong and independent, with many stories to tell.

In the city, at the beginning of autumn, few people remain to inhabit the sidewalks and walls. The relentless heat has destroyed the weeds, leaving only grass straw and a couple of diehards, proud to have survived. The most conspicuous display imposing bunches of sticky leaves, a beautiful tender green, and scrambled yellow flower heads, gathered in panicles, which resemble those of Arnica. I knew her as *Inula viscosa* and knew that she was related to *Inula campana*, a well-known medicinal plant. But every time I decide to photograph a weed I happen to learn something new. In this case I discovered that morphological differences in the achenes and pappi were detected, which led to the separation of the plant in question from the genus *Inula* and led to the creation of the genus *Dittrichia*, in honor of Manfred Dittrich, an expert on Asteraceae and former director of the Berlin Botanical Garden. I can't delve too deeply into these to-



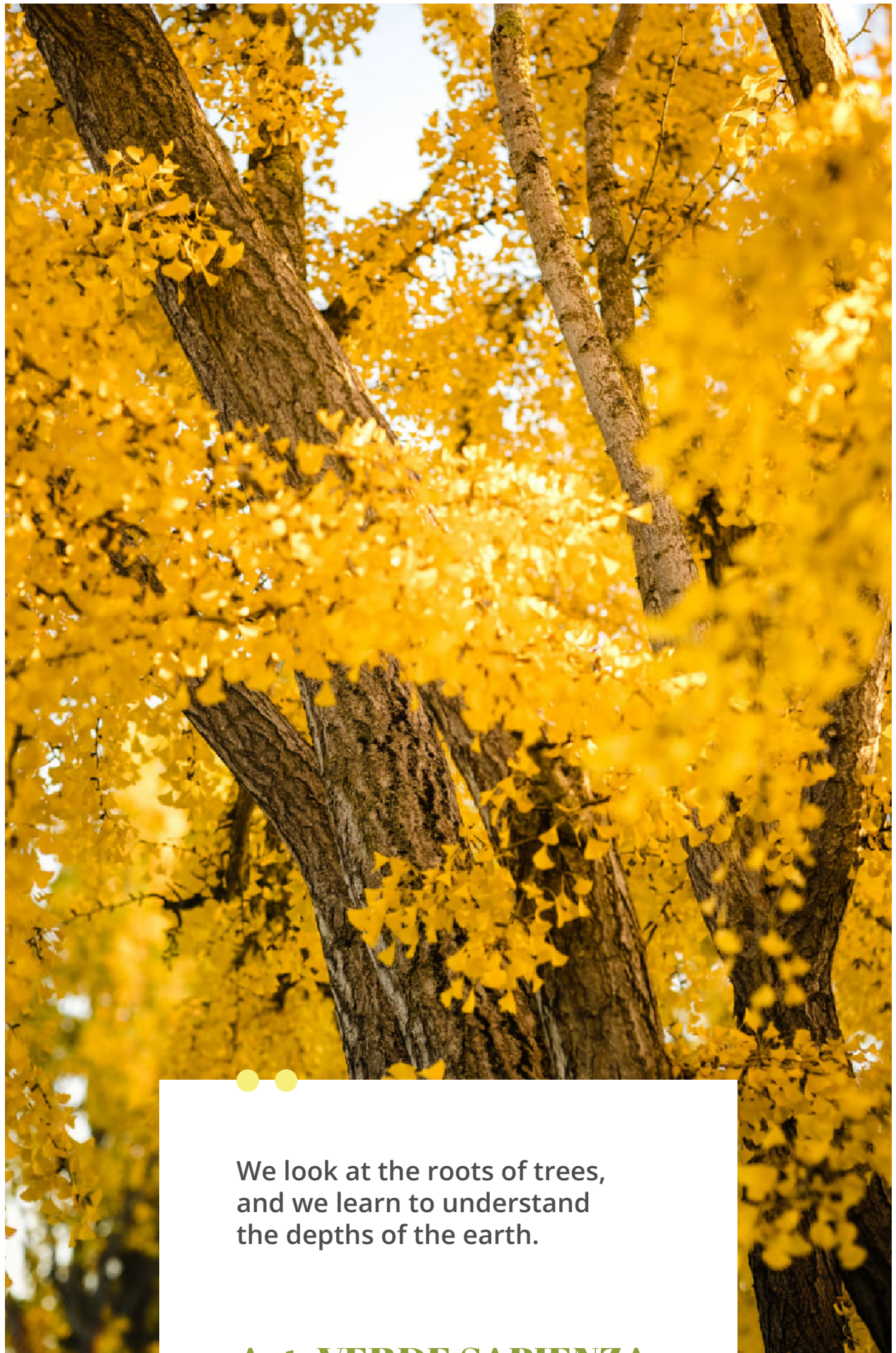
Flower of *Dittrichia viscosa* L. Greuter

pics, but these modifications certainly don't matter to *Dittrichia ex Inula*, which boasts Eastern origins and has had a fair amount of fame in the past in its popular healing uses: it was once known for its effectiveness in treating dermatitis, eczema, and insect bites. Today it is still used in agriculture, together with other systems, for the natural containment of the olive fly. Herbivores dislike its strong aromatic odor, but its late flowering provides bees with abundant pollen and nectar at a time when blooms are scarce, thus contributing to the autumn production of the last wildflower honey. Instead, *Dittrichia monoflora*, due to its overly intense flavor and irregular crystallization, is left by beekeepers to bees for their winter reserves.

CHARTER OF PLANT RIGHTS

*From "La Nazione delle Piante"
by Stefano Mancuso*

- art.01** The Earth is the common home of life.
Sovereignty belongs to every living being.
- art.02** The Plant Nation recognizes and guarantees the inviolable rights of natural communities as societies based on the relationships between the organisms that compose them.
- art.03** The Plant Nation does not recognize animal hierarchies, based on concentrated command centers and functions, and favors widespread and decentralized plant democracies.
- art.04** The Plant Nation universally respects the rights of living people today and those of future generations..
- art.05** The Plant Nation guarantees the right to clean water, soil and atmosphere.
- art.06** Consumption of any non-reconstitutable resource for future generations of the living is prohibited.
- art.07** The Plant Nation has no borders.
Every living being is free to transit, relocate, inhabit it without any limitations.
- art.08** The Plant Nation recognizes and promotes mutual support among natural communities of living beings as a tool for coexistence and progress.



We look at the roots of trees,
and we learn to understand
the depths of the earth.

Art. VERDE SAPIENZA

Our objective

Promote knowledge and the sharing of it related to the plant world through an approach that integrates tradition, contemporary research, and future perspectives, to foster a conscious and accessible culture.

Contribute to the construction of a balanced and respectful relationship between all beings as a mutual source of well-being, a relationship that is recognized as a heritage of knowledge and a reference for a shared and participated ecosystem.



Pontederia crassipes Mart.