

ARCHIVES OF THE LIVING

GERMANY / AUSTRIA

How Much Memory Does a Plant Carry?

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NOTE ON THE RESEARCH

The research underlying this catalogue arose from the artist's personal curiosity and was supplemented and expanded with the help of ChatGPT during the working process. Botanical, ecological, historical, mythological, medical, and pharmacological sources were consulted, alongside cultural-historical traditions and personal associations.

The information compiled here makes no claim to scientific completeness or freedom from error and is provided without guarantee. Historical plant names, mythological traditions, and medical attributions in particular cannot always be unequivocally related to present-day botanical species and scientific knowledge.

The research is therefore not intended as a scientific reference work, but as part of the artistic process of *Archives of the Living*. It makes visible the paths the artist follows from a plant: from a botanical peculiarity to a historical source, from a name to a myth, from an active compound to a memory, or from an ecological relationship to an unexpected cultural connection.

This openness is intentional. The texts are intended to make it possible to trace how curiosity becomes research and research becomes a *Florilegical Narration*. Above all, they seek to encourage readers to keep asking questions, to read further, to disagree, to discover connections – and to become infected by curiosity about the stories and relationships of plants.

HEART-LEAVED WATER-PLANTAIN

Caldesia parnassifolia (L.) Parl.



BOTANY

Heart-leaved water-plantain belongs to the water-plantain family (Alismataceae). *Caldesia parnassifolia* is a perennial aquatic and marsh plant. It is characterised by its long-stalked, oval to heart-shaped floating leaves and a paniculate or pyramidal inflorescence. The white flowers have three smaller outer and three larger inner petals. The plant can also form winter buds, known as *turions*, which enable vegetative survival.

In Central Europe, it inhabits shallow, nutrient-poor to moderately nutrient-rich waters, muddy shore areas, silting zones, and floating mats. In Germany, only one natural occurrence is now known, in a Bavarian fishpond in the Charlottenhofer Weihergebiet nature reserve. The German Red List classifies the species as Category 1 – Critically Endangered. It is also protected under Annexes II and IV of the Habitats Directive (Fauna-Flora-Habitat Directive). Kew lists the species as extinct in Austria.

HISTORY

Heart-leaved water-plantain is an example of how a species once more widespread in Central Europe can become a botanical relict. Its present rarity is closely linked to changes in wetlands, pond landscapes, and silting zones. Remarkably, the last German occurrence lies in a pond landscape historically shaped by human activity. The distinction between “nature” and “cultural landscape” thus becomes blurred: a landscape created by humans or managed over centuries can become the final refuge of a rare species.

MAGIC AND MYTH

No distinct independent mythological tradition is known for *Caldesia parnassifolia*. It is precisely this absence that becomes productive for the *Florilegical Narration*. The German name “Herzlöffel” combines two very different forms: the heart, a culturally charged sign of love, memory, and life, and the spoon, an everyday vessel for scooping and receiving. The heart-shaped floating leaves already carry this human reading in the name, without requiring the construction of a historical myth.

MEDICINE

There is no established modern medical use for heart-leaved water-plantain. Its significance today lies primarily in species and habitat conservation. This is precisely what distinguishes it from plants such as arnica: its value does not need to be justified through medical usefulness.

PHARMACY

Heart-leaved water-plantain is not an established herbal drug of the European Medicines Agency (EMA). This pharmacological absence is not understood here as a deficiency, but as part of the archive: a plant can be biologically, ecologically, and culturally significant without serving humans as a medicine.

IMAGE ANALYSIS

In the work, heart-leaved water-plantain is removed from its aquatic habitat and transferred into the order of still life. The plant thus stands between two spaces: the sensitive wetland on which its survival depends and the cultural pictorial space in which it is to be preserved. The reduced colour palette of the early still lifes in *Archives of the Living* shifts the natural appearance towards memory. The plant remains visible, yet its colour and habitat are no longer simply available. The heart-shaped leaves in particular become a visual sign of memory: the “heart” remains while the occurrence itself has almost disappeared.

FLORILEGICAL NARRATION

Heart-leaved water-plantain tells of a paradoxical last place. A plant with a wide global range has already disappeared from Austria and, in Germany, has been reduced to a single natural occurrence. The heart in its name thereby becomes a form of remembrance: not sentimental, but geographical. It marks the fact that a species can be absent from one place even though it continues to exist elsewhere.

In *Archives of the Living*, heart-leaved water-plantain thus becomes a plant of local disappearance. Its archive consists of water levels, mud, pond management, winter buds, historical sites, and one last refuge. The question is not only whether the species survives globally, but what is lost when a landscape loses its plant.

INSPIRING FURTHER LITERATURE / LINKS

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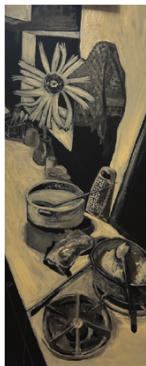
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ARNICA

Arnica montana L.



BOTANY

True arnica belongs to the daisy family (Asteraceae). The perennial plant forms a basal rosette of leaves and an upright stem with characteristic orange-yellow flower heads. It grows primarily in acidic, nutrient-poor meadows, matgrass grasslands, heathlands, and montane to subalpine habitats.

It is precisely this dependence on nutrient-poor habitats that makes it sensitive to changes in land use. Fertilisation, intensification, abandonment of use, and afforestation can alter suitable sites or cause them to disappear entirely.

The 2022 Red List of ferns and flowering plants of Austria classifies *Arnica montana* nationwide as LC – Least Concern. This overall assessment, however, conceals considerable regional differences: in the Bohemian Massif it is considered Endangered, and in the northern and south-eastern Alpine foreland even Critically Endangered. The species has undergone substantial declines particularly at lower elevations.

HISTORY

Arnica is now one of the best-known medicinal plants of the Alpine region. Vernacular names such as the German “Bergwohlverleih” point to its long-standing place in European folk medicine.

A clear identification of *Arnica montana* in the ancient *De materia medica* of Pedanius Dioscorides, by contrast, is not established. The familiar European tradition of arnica developed largely in later herbals and practices of folk medicine.

Historical plant descriptions are therefore related cautiously to present-day botanical knowledge. A plant described by an ancient author cannot always be unequivocally assigned to a species as scientifically defined today.

MAGIC AND MYTH

Arnica was not only a medicinal plant but also a protective plant. Its yellow flowers and flowering season linked it in European folk belief with the sun and the summer solstice. As the “St John’s flower”, it was incorporated into customs surrounding St John’s Day.

Regionally, it was believed to have the power to protect house, farm, or fields from lightning, hail, fire, and other harmful influences. Arnica could thus become an *apotropaic* object – a supposed means of warding off harm.

James George Frazer documents corresponding Central European plant customs in *The Golden Bough*. The Research Group on Monastic Medicine likewise points to the connection between arnica, St John’s Day, solar symbolism, and ideas of protection.

This history is particularly striking in the work: precisely the intense yellow that encouraged the cultural association with the sun is pictorially withdrawn. Viewers have to remember it.

MEDICINE

Arnica is traditionally used externally for blunt injuries, bruises, sprains, and local complaints of the musculoskeletal system.

Historical use and present-day medical assessment must be distinguished from one another. Uncontrolled internal use in particular is problematic because of possible adverse effects.

PHARMACY

Among the pharmacologically most relevant constituents of arnica flowers are so-called *sesquiterpene lactones*, particularly *helenalin* and related compounds. These plant constituents contribute substantially to arnica's anti-inflammatory effects. At the same time, they can cause skin irritation and allergic contact reactions in sensitive individuals.

The European Medicines Agency (EMA) lists arnica flowers as *Arnicae flos* in a herbal medicinal product monograph.

IMAGE ANALYSIS

The large-format arnica painting shifts the familiar medicinal plant from the realm of the household remedy into the status of a portrait. The reduced colour palette deprives it of the expected bright yellow; the colour has not disappeared, but is transferred into the viewers' memory. What we believe we know and see about arnica is completed in the act of viewing.

The plant appears upright, yet at the same time already in a state of visual transformation. The image thus connects botanical presence with the tradition of *vanitas*: it is not an already wilted plant that announces transience, but a still-living one whose familiar appearance has begun to waver.

Arnica is deliberately placed in a kitchen setting – an everyday place of preparing, mixing, extracting, and storing. Kitchen and home pharmacy overlap. The space thus refers to the experiential knowledge passed down over generations through which plants became remedies, long before their constituents could be pharmacologically isolated and standardised. The kitchen appears as an early laboratory of everyday life.

Yet this space offers no security. Everything is distorted; nothing is quite right. Perspectives tilt, proportions and spatial relationships evade a clear order. This very irritation contradicts the idea of a controllable laboratory or kitchen space. Arnica is situated in a place where something healing might be made from nature – and at the same time in a world whose order has come apart.

A paradox emerges: of all things, the medicinal plant stands in a space that itself seems to be in need of healing. Arnica thus becomes not only an object of medicinal memory, but an image of a present in which traditional plant knowledge, ecological endangerment, and the human need for control increasingly drift apart. Contemporary *vanitas* lies not only in the possible disappearance of the plant. It also lies in the fragility of the relationships and forms of knowledge that have connected people with it for centuries.

FLORILEGICAL NARRATION

The *Florilegical Narration* of arnica begins with a contradiction: a plant used for centuries to treat injuries is itself dependent on vulnerable habitats. Arnica stands for healing, yet it can disappear where nutrient-poor meadows are abandoned, intensified, or altered.

In the image, these two stories meet. Arnica stands in a kitchen – that everyday place where plants were traditionally processed, dried, boiled, or prepared as household remedies. The kitchen setting thus refers

to knowledge about plants and their effects passed down over generations. At the same time, nothing in this space is quite right: perspectives are displaced, proportions are unsettling, and the familiar place loses its order.

Arnica itself no longer fully corresponds to our memory either. Its characteristic yellow is absent or greatly reduced. Viewers must supplement the familiar colour from their own memory.

INSPIRING FURTHER LITERATURE / LINKS

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EDELWEISS

Leontopodium alpinum Cass.



BOTANY

Alpine edelweiss belongs to the daisy family (Asteraceae). What appears to be a large white flower actually consists of small yellowish flower heads surrounded by star-shaped, densely white-felted bracts.

The hair covering is part of the plant's adaptation to extreme alpine environmental conditions such as intense solar radiation, wind, drought, and temperature fluctuations.

HISTORY

Hardly any Alpine plant has been culturally transformed as strongly as edelweiss. In the nineteenth century it became a symbol of alpinism and later a sign of Alpine and national identities. The plant migrated from the mountain onto badges, uniforms, coins, souvenirs, and logos. It also became the name of a resistance movement against National Socialism in Upper Austria. An organism became an emblem.

A particularly influential international reinterpretation emerged through the musical *The Sound of Music* by Richard Rodgers and Oscar Hammerstein II, which premiered on Broadway in 1959 and was adapted for film in 1965. The song "Edelweiss" is not a traditional Austrian folk song, although its musical style has often led it to be mistaken for one. Rodgers and Hammerstein wrote it specifically for the musical. In the story, Captain von Trapp sings the song as an expression of his attachment to Austria and as a quiet protest against the National Socialist annexation of the country. The Rodgers & Hammerstein rights holders explicitly describe it as a "subtle protest" against the National Socialist "Anschluss".

Edelweiss thus acquired an additional layer of meaning internationally: the Alpine flower became not only an image of homeland, but also a symbol of a threatened Austria whose independence is asserted in the story against National Socialism. This symbolic charge, however, belongs to the later American history of the musical and film and must not be confused with a historical Austrian resistance song from the years 1938–1945.

The best-known resistance song that draws a direct connection between edelweiss and the struggle against the Nazi regime in the years 1938–1945 is the song of the Edelweiss Pirates. Although the Edelweiss Pirates were a youth protest and resistance movement active mainly in the German Rhineland, their clandestine fighting song explicitly invokes Austria as a place of refuge and a symbol of freedom. The young people used the edelweiss as a secret identifying sign on their clothing, often beneath a lapel. They refused to join the Hitler Youth and actively resisted. In their imagination and songs, the Austrian mountains represented a wild, free place beyond the reach of the Gestapo.

The symbol of edelweiss also played an important role in regional resistance. Although the group in Austria did not bear this name, edelweiss in the mountains was an important secret sign. Wearing an

edelweiss on an Alpine hut or on clothing often signalled to partisans and deserters: “I am on your side and will not betray you.” Women from the region risked their lives to supply the men in the mountains with food, including Theresia “Resi” Pesendorfer (1902–1989). There was no independent “Edelweiss resistance group” in Upper Austria, but edelweiss was an important symbol of the mountain partisans in the Salzkammergut (the Willy-Fred group) and is the title of a well-known novel about this Upper Austrian resistance.

MAGIC AND MYTH

The myth of edelweiss is surprisingly young. In the nineteenth century, the romantic idea spread of a young man risking his life to climb inaccessible rocks in order to bring his beloved an edelweiss. The plant became a symbol of love, courage, fidelity, and willingness to sacrifice. Other Alpine traditions connect it with supernatural female figures or explain the origin of the white flower through tears. In the Zillertal, a tradition is also recorded of burning edelweiss as incense to keep harmful influences or spirits away from livestock. There is, however, no unequivocal mention of *Leontopodium alpinum* in Dioscorides. This is precisely what makes edelweiss interesting: modern societies, too, create plant myths.

MEDICINE

Edelweiss was used regionally in Alpine traditions of folk medicine. Such uses must be distinguished from modern clinical evidence.

PHARMACY

Modern research investigates constituents of *Leontopodium* species, among other things, for antioxidant and inflammation-modulating properties. No general medicinal indication can be derived from this.

IMAGE ANALYSIS

The image confronts one of the best-known Alpine plants with the loss of its familiar appearance. What happens when precisely those qualities by which a cultural symbol is immediately recognised are withdrawn? The painting leads from the emblem back to the organism.

FLORILEGICAL NARRATION

The plant becomes a projection surface for human values. The work asks what remains visible of the actual plant behind the symbol.

INSPIRING FURTHER LITERATURE / LINKS

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TURK'S-CAP LILY

Lilium martagon L.



BOTANY

Turk's-cap lily belongs to the lily family (Liliaceae). Its nodding flowers have strongly recurved tepals, while the stamens and style project far beyond the flower. This morphology creates an extraordinary spatial tension: the flower draws its petals back while simultaneously exposing its reproductive organs.

HISTORY

The German name "Türkenbund" and the English name "Turk's-cap lily" refer to the historical perception of the recurved flower as a turban-like form. The name therefore tells us not only something about the plant. It also tells us something about the cultural images of the people who named it.

MAGIC AND MYTH

Lilies are among the most mythologically significant flowers in European cultural history. In Greek traditions, lilies are associated with Hera. In later Christian iconography, the white lily in particular became an attribute of Mary and a sign of purity and the Annunciation. This general lily iconography, however, must not be presented directly as a specific mythology of *Lilium martagon*. Dioscorides describes lilies and their medicinal use; here too, caution is required when equating historical names with present-day species. In *Lilium martagon*, the particularly interesting mythopoetic layer lies in the name itself: the plant wears a turban because people saw a turban in its form.

MEDICINE

Various lily species were used medicinally in the past. For *Lilium martagon*, however, there is no established modern medicinal indication that could be derived from these traditions.

PHARMACY

The genus *Lilium* is the subject of phytochemical research. *Lilium martagon* is not an established herbal drug of the European Medicines Agency.

IMAGE ANALYSIS

The unusual flower morphology becomes the movement of the image. Curling back and projecting forward, protection and exposure, occur simultaneously. The flower appears almost like a choreographic gesture. Instead of a presumed fallen blossom on the suggested cloth, there is a wave-shaped shell. Within the vase itself, the flower's curved lines are formally reflected.

FLORILEGICAL NARRATION

Turk's-cap lily makes something visible: plant names, too, are archives. They preserve not only botanical information, but historical perceptions and cultural images.

INSPIRING FURTHER LITERATURE / LINKS

Beck, L. Y. (Trans.). (2005). Pedanius Dioscorides of Anazarbus: *De materia medica*. On the historical tradition of lilies.

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Royal Botanic Gardens, Kew. Plants of the World Online: *Lilium martagon*.

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UPRIGHT CLEMATIS

Clematis recta L.



BOTANY

Upright clematis (*Clematis recta* L.) belongs to the buttercup family (Ranunculaceae). The specific epithet *recta* comes from Latin and means “upright”, because unlike most other clematis species this one does not climb but grows as an upright perennial. Its very habit unsettles the expectation evoked by its genus name. While many clematis species climb, *Clematis recta* grows herbaceously and largely upright. Numerous small white flowers form loose inflorescences. The opposite leaves are imparipinnate, with five to nine leaflets, and are about 20 centimetres long. The species prefers warm, open margins, dry and semi-dry grasslands, as well as open scrub and woodland edges. Its origin lies in Eastern Europe.

According to the current Austrian Red List, it is assessed as NT – Near Threatened; an up-to-date study from Lower Austria likewise gives NT for the Pannonian region. It is therefore not acutely threatened with extinction, but it is already in a category that demands attention. In Styria, upright clematis is also explicitly listed in the species protection ordinance.

HISTORY

The name *Clematis* goes back to Greek and referred to twining or climbing plants. *Recta*, by contrast, means straight or upright. The scientific name thus already contains a tension: an upright climbing plant. The species resists the expectation of its own genus. *Clematis recta* was first published by Carl Linnaeus in *Species Plantarum* in 1753.

MAGIC AND MYTH

Clematis species have a long history in folklore. Their twining forms, which attach themselves to other plants, have been associated with binding, entwining, and movement. In *Clematis recta*, however, this symbolism is disrupted. It does not need to climb in the same way. For the *Florilegical Narration*, the botanical difference itself therefore becomes interesting: a plant belongs to a group but does not fully conform to the image we have of that group. Historical *Clematis* names cannot be equated with the present-day *Clematis recta* without taxonomic examination.

MEDICINE

Like other members of the buttercup family, the fresh plant contains irritating substances. Traditional uses of clematis species must therefore by no means be equated with a safe modern medicinal-plant application. The plant is an old folk medicinal plant, formerly valued for its acrid constituents such as *protoanemonin*. The “beggar’s herb” trick: fresh plant sap strongly irritates the skin and produces artificial blisters. In earlier centuries, upright clematis was therefore misused by some beggars to simulate skin diseases and arouse pity. When dried, however, the plant is non-toxic and loses its irritating effect. To this day it is used in homeopathic household medicine as *Clematis recta*, among other things for irritation of the skin and mucous membranes. All parts of the plant are poisonous.

PHARMACY

The genus *Clematis* has been pharmacologically investigated because of various secondary plant metabolites. For *Clematis recta*, however, there is no established European herbal drug comparable to arnica or common centaury.

The pharmacological absence is as much a part of the archive here as the knowledge that exists.

IMAGE ANALYSIS

Upright clematis introduces a movement into the series that initially appears unspectacular: it grows upwards. Yet this is precisely where its peculiarity lies. While many of its relatives climb, hold on, and use other plants or structures as supports, *Clematis recta* lives up to its name: it stands by itself. The small white flowers lend it an almost fragile lightness that contrasts with the determined verticality of its growth. In the image, this relationship is intensified further. The plant rises from a vase that is far too small and seems barely capable of supporting its body. The vessel provides support and at the same time appears inadequate – as though the balance could be lost at any moment. The proportions of the image also refuse a realistic order. On the left in the foreground, an oversized aphid appears, moving towards the plant. Plant, vase, and insect bear no plausible proportional relationship to one another. This displacement is deliberate: what is normally tiny and almost invisible suddenly acquires a threatening presence; what should provide support appears too small; and yet the fragile plant maintains its upright position. The image thus plays not only with botanical proportions but with a broader state of imbalance. Familiar scales come apart. Small and large, fragile and threatening, support and lack of support reverse their usual relationships. Amid this unstable order, the clematis remains upright. Its verticality therefore appears less as a botanical characteristic than as a form of assertion: it stands even though the conditions around it are no longer in balance.

FLORILEGICAL NARRATION

In this way, *Clematis recta* can embody a different form of endangerment in *Archives of the Living*. It is not only imminent disappearance that matters. The Near Threatened category is also a story. It describes that moment when a plant is still present, but changes have already become visible.

INSPIRING FURTHER LITERATURE / LINKS

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