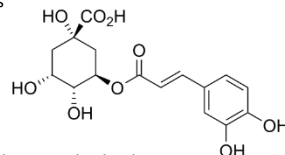




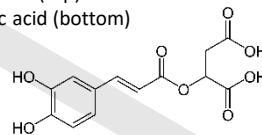
The genus *Urtica* is derived from Latin words meaning “to burn” or “to sting”. *Dioica* (Latin for “two houses”) references that it’s a dioecious plant. That is, the plants have either male or female reproductive organs but not both.

## Plant of the Month

By Hava Waldstreicher, Alkemist Labs



Main analytes in the herb:  
chlorogenic acid (top) and  
caffeoylmalic acid (bottom)



## Pharmacology

Stinging nettle's herbs and roots both have therapeutic effects supported by clinical trials and through traditional experience. The root is used to treat benign prostatic hyperplasia, a common condition that affects the urinary flow of men due to an enlarged prostate. The active compounds that improve urine flow are still unknown, which makes quality control difficult. The herb has diuretic properties, which could be attributed to its potassium content. It's also a component in treatments for hay fever and painful joints because it has anti-inflammatory effects.

## History/Traditional Use

Since ancient times, stinging nettles have been widely used by people across the Northern Hemisphere. All parts of the plant have traditionally been used for various purposes, although the aerial parts are more regularly used than the roots. The leaves are used medicinally to treat a very wide variety of ailments. They are also eaten, used as a plant-based rennet, or wrapped around fruit to speed up ripening. The stems and leaves can be made into paper, thread, fabric and ropes. The roots have been used to treat assorted diseases as well as eaten.

# Stinging Nettle

*Urtica dioica*



Alkemist Labs, Inc 2020

## Botany (trichomes)

Irritating compounds (histamine, acetylcholine, and serotonin) are stored in needle-like trichomes on the stems and leaves of stinging nettles. When you come in contact with the trichomes, the tip breaks off, pierces the skin, and the liquid is released, triggering a painful rash. The sting has actually been used in folk medicine to treat rheumatism. It is administered through a process called “urtification” in which one is flogged with a whole plant. People have also used urtification to warm the body in cold climates.



A man undergoing urtification

## Cultivation/Preparation

The majority of stinging nettles are wild-harvested in Central and Eastern Europe. They are also commercially cultivated but on a much smaller scale. The aerial parts are harvested between spring and late summer (depending on how they will be prepared) and the roots are harvested in the autumn. Fresh leaves are used for urtification and in soup or juice. Dried leaves and roots can be made into capsules, tablets, teas, extracts, and tinctures.

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