Herbal Actions Profile: Nervines

Nervines

The nervine materia medica represents one of the most important categories of herbal medicines for the modern day client. With stress, fatigue, insomnia, anxiety, and tension being some of the most common complaints an herbalist will face, knowing your nervines is critical for holistically addressing these far too common issues.

Let’s face it, the world we live in is stressful for most people. Our modern western society moves at lightning speed, people are sleeping less than ever before, consumption of caffeine containing plants is at an all time high, and the stresses of our culture are having a major impact upon the health of the human nervous system.

Unfortunately what we see more commonly than not in terms of what are generally recommended for the stressed our client is the category of plants referred to as adaptogens. While this is a critically important category of herbs, many of which have nothing short of remarkable effects on the human organism, they are oftentimes used out of context, as quick energy fixes, and can actually enable people to further their burnout symptoms. These popular remedies like Ashwaganda and Eleuthero are “the new Echinacea” and have become the most popular and discussed herbs in the natural products industry.

In my humble opinion, adaptogens are far too often prescribed when the nervine category would actually be much better suited. People tend to reach a certain degree of nervous system burnout before they reach true endocrine burnout- or what most people commonly refer to as “exhausted adrenals.” It takes a relatively significant amount of time for people to reach actual true endocrine system burnout, at which point they are actually really in a bad place. What most people experience (especially younger folks) is nervous system exhaustion, and this is the place where our nervine materia medica truly shines. It’s also where excessive or inappropriate use of adaptogens can actually do more harm than good (we’ll discuss that in more detail in the adaptogen lesson in the program).

The nervous system forms one of the primary mechanisms of communication throughout the body, directly translating sensory data from the outside world to the crafting of our automated and voluntary responses to those stimuli. The primary elements of the nervous system that we see a bulk of our nervine remedies acting on is the autonomic branch of the motor nervous system. The autonomic nervous system consists of the parasympathetic and sympathetic branches, which are responsible for resting and digesting, and the fight, flight, or freeze response, respectively. While there are a handful of remedies working on the central nervous system within the brain and certain nerves branching from the spine, it is on the autonomic branch that most are specifically focused on.

This is a critical therapeutic strategy, because the anxious, stressed, tense, insomniac type client tends to be overly focused on the sympathetic branch of the autonomic nervous system and deficient in the parasympathetic side. This leads to a wide range of physiological symptoms, such as elevated blood pressure, heart rate, lack of circulation to the internal organs, shutting down of the digestive apparatus (and most people these days have GI symptoms as well), stimulation of the nervous system, initiation of the sensation of fear, and an overall unsettled feeling. You cannot be restful, at peace, or properly digest and assimilate...
food when your sympathetic nervous system is overstimulated. I have found this to be one of the most common patterns in my clients over the last few years.

Interestingly enough, our nervine materia medica is not only working on the neurological component by shifting the body towards enhances parasympathetic functioning, but many of these remedies also support digestion through either bitter tonic or carminative actions. They are like a formula unto themselves.

The term nervine itself is yet another relatively loose term in western herbalism, and technically is referring to the organ affinity of an herb to the nervous system. More commonly than not, this is in reference to plants which generally have a calming action on the nerves, but technically speaking Coffee is a nerve because it’s working on the nervous system!

In this way, I find it useful to break down our nervine materia medica into some more specific categories that allow you to understand the relative strength of action, as well as secondary digestive effects and energetics of the herbs. This enables you to become much more precise in your selection and formulation of nervous system remedies to match the specific constitutional dynamics and symptomatic patterns of your clients. Generally speaking, I tend to break down nervines into 4 different categories: stimulants, relaxants, hypnotics, and trophorestoratives. Here we will take a look at each of those categories and list out the corresponding remedies.

**Nervine Stimulants**

Nervine stimulants are essentially herbs that will directly stimulate the nervous system, more commonly the sympathetic branch. They tend to act upon the adrenal medulla and it’s excretion of the neurotransmitters epinephrine and norepinephrine, which directly trigger the fight/flight/freeze response. They oftentimes have circulatory stimulant actions, elevate heart rate, quicken and shorten the breath, and in the long term can have a depleting effect on the nervous system, and affect appetite and digestion. Most of the plants in this category are those which contain stimulant alkaloids such as caffeine.

These are not necessarily very commonly used plants as herbal medicines per se, but are rather typically used as “pleasure plants” or recreational. Certainly they do have their medicinal properties, but more often than not their cumulative effects are more damaging to the system than they are healing. My personal theory is that these plants raise our metabolism and contribute to the aging process. That being said some of the remedies listed below are considered adaptogens, which can in particular dosage ranges be significantly stimulating to the nervous system.

Oftentimes for the client that consumes nervine stimulants on a consistent basis I recommend working with the other 3 categories of nervines, as they are opposite in their effects. Here’s a list of commonly used nervine stimulants:

- Cacao (*Theobroma cacao*)
- Coca (*Erythroxylum coca*)
- Coffee (*Coffea arabica*)
- Cola (*Cola acuminata*)
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Eleuthero (*Eleutherococcus senticosus*) *
Ginseng (*Panax ginseng*) *
Nutmeg (*Myristica fragrans*) *
Sassafras (*Sassafras albidum*)
Tea (*Camellia sinensis*)
Rhodiola (*Rhodiola rosea*) *
Schizandra (*Schisandra chinensis*) *
Yerba Mate (*Ilex paraguariensis*)
Yohimbe (*Pausinystalia yohimbe*)

*These remedies are dose dependent in regards to their stimulant effects

### Nervine Relaxants

I also sometimes refer to this category of nervines as “sedatives.” These are our milder remedies which calm, sedate, and relax the nervous system. Their strength is in their weakness, in the sense that they can oftentimes be used throughout the day and will not tend to make you sleepy, groggy, or very low in energy. Many of these remedies also have mixed carminative and bitter actions and assist in digestion as well. I like to think of these remedies as those that help to “smooth out the rough edges” and gently calm an overly excitable nervous system.

Ashwaganda (*Withania somnifera*)  
Blue Vervain (*Verbena hastata*)  
Borage (*Borago officinalis*)  
Catnip (*Nepeta cataria*)  
Chamomile (*Matricaria recutita*)  
Damiana (*Turnera diffusa*)  
Hawthorn flower (*Crataegus monogyna*)  
Holy Basil (*Ocimum sanctum*)  
Lavender (*Lavandula angustifolia*)  
Lemon Balm (*Melissa officinalis*)  
Linden (*Tilia europea*)  
Motherwort (*Leonurus cardiaca*)  
Mugwort (*Artemisia vulgaris*)  
Pulsatilla/Pasqueflower (*Anemone pulsatilla*)  
St. John’s Wort (*Hypericum perforatum*)  
Wood Betony (*Stachys officinalis*)

### Nervine Hypnotics

Where the nervine relaxants/sedatives are the mild ones, the hypnotics are the strong ones. They essentially do similar things than the relaxants do, but with quite a bit more “oomph” and in this way can generate a marked level of sedation, relaxation, and sleepiness. As the name implies, hypnotics have the ability to induce a certain state of hypnosis, that is, a much stronger level of calm. These are typically remedies that are used in more acute situations of pain, insomnia, drug withdrawal, or more extreme cases of anxiety, panic attacks, and the
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overall need for a stronger level of sedation than the relaxants can offer. Oftentimes in order for them to really be effective for the treatment of something like pain they should be used in dosage ranges that begin to generate an adjusted state of consciousness (basically you start to feel a little ditsy and stoned from it).

In that way the main caution with many of these herbs is that they can definitely make one feel overly tired if used in excess during the day. It’s also worth mentioning here that many of these remedies are somewhat dose dependent, and everyone tends to respond to them very differently. For example 5 drops of Valerian might knock someone out, whereas another needs 3 dropperfuls, and a 3rd person might be kept awake all night because they feel stimulated from it!

To me these remedies remind of the story of Goldilocks and the 3 Bears. Some remedies are a bit too hot, too cold, too hard, too soft… but there’s usually that one remedy or dosage that’s juuuuust right. I encourage you to experiment with these herbs to find which ones you really like, as well as with the dosages to see the effects of different dosage ranges. It’s also important to educate clients on this so that they can experiment with how much they take until they find that sweet spot.

Our stronger nervine hypnotics include:

California Poppy (*Eschscholzia californica*)
Hops (*Humulus lupulus*)
Jamaican Dogwood (*Piscidia erythrina*)
Kava-Kava (*Piper methysticum*)
Passionflower (*Passiflora incarnata*)
Pedicularis (*Pedicularis spp.*)
Skullcap (*Scutellaria lateriflora*) *
Valerian (*Valeriana officinalis*)
Wild Lettuce (*Lactuca virosa, L. scariola*)

*Skullcap’s hypnotic properties truly shine in the form of a powder, or an infusion of the herb in water that is below boiling temperature! This is key, something about boiling water deactivates Skullcap and renders it much less active. Tincture of Skullcap I consider to be a slightly different medicine.

**Nervine Trophorestorative**

These are my favorite types of nervines, for they have an effect upon the nervous system that is not remarkably calming and sedative, rather it is directly restorative to a worn down nervous system. These types of remedies are incredible in their capacity to directly strengthen, tonify, and restore a nervous system that is depleted from long term periods of stress, lack of sleep, drug/alcohol use, and simply overall burnout. I routinely give these remedies to many of my clients and can attest to their wonderful effects, especially over longer term use. I often give these before I ever consider giving an adaptogen, or if adaptogens are indicated I will administer them alongside them.
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Ashwaganda (*Withania somnifera*)
Borage (*Borago officinalis*)
Damiana (*Turnera diffusa*)
Gotu Kola (*Centella asiatica*)
Lavender (*Lavandula angustifolia*)
Lemon Balm (*Melissa officinalis*)
Lion’s Mane mushroom
Milky Oats (*Avena sativa*)
Reishi (*Ganoderma spp.*)
Skullcap (*Scutellaria lateriflora*)
St. John’s Wort (*Hypericum perforatum*)
Wood Betony (*Stachys officinalis*)

Here are a few other categories of herbs with nervine affinities, but also stronger secondary actions in terms of antispasmodic and anodyne capabilities.

**Anti-Spasmodic**

Black Cohosh (*Cimicifuga racemosa*)
Black Haw (*Viburnum prunifolium*)
Crampbark (*Viburnum opulus*)
Lobelia (*Lobelia inflata*)
Pedicularis (*Pedicularis spp.*)
Pulsatilla (*Anemone pulsatilla*)

*Note: All nervine hypnotic materia medica is for the most part anti-spasmodic as well.*

**Anodyne**

California Poppy (*Eschscholzia californica*)
Jamaican Dogwood (*Piscidia erythrina*)
Kava-Kava (*Piper methysticum*)
Pedicularis (*Pedicularis spp.*)
Prickly Ash (*Zanthoxylum americanum*)
St. John’s Wort (*Hypericum perforatum*)
Wild Lettuce (*Lactuca virosa, L. scariola*)

*Note: Many nervine hypnotics are also anodyne

*Note: These 2 remedies are specifics for nerve pain

**“Shen Tonic”**

I think of this category of nervines as being remedies which assist in either uplifting the spirit when it is down in the dumps (IE depression/melancholic) or to help stabilize, center, and ground when consciousness is swirling up in the Ethers.
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Calendula (*Calendula officinalis*)
Gotu Kola (*Centella asiatica*)
Holy Basil (*Ocimum sanctum*)
Lemon Balm (*Melissa officinalis*)
Milky Oats (*Avena sativa*)
Mimosa flower (*Albizia spp.*)
Schizandra (*Schisandra chinensis*)
St. John’s Wort (*Hypericum perforatum*)
Wood Betony (*Stachys officinalis*)

Nervines by Organ Affinity

Here are some basic listings of herbs in the ways in which they can relax tension within particular organ and systems. Note that some of these organ systems are not directly innervated by the nervous system (such as the liver) but rather the nervous system is determining the circulation to that organ.

**Hepatic**
Rosemary (*Rosmarinus officinalis*)
Blue Vervain (*Verbena bastata*)
Lavender (*Lavandula angustifolia*)
Hops (*Humulus lupulus*)
Chamomile (*Matricaria recutita*)

**Cardiovascular**
Lemon Balm (*Melissa officinalis*)
Motherwort (*Leonurus cardiaca*)
Linden (*Tilia europea*)
Hawthorn flower (*Crataegus monogyna*)
Crampbark (*Viburnum opulus*)

**Musculoskeletal**
Black Haw (*Viburnum prunifolium*)
Crampbark (*Viburnum opulus*)
Pedicularis (*Pedicularis spp.*)
Black Cohosh (*Cimicifuga racemosa*)
Wild Lettuce (*Lactuca virosa, L. scariola*)
Kava-Kava (*Piper methysticum*)
Prickly Ash (*Zanthoxylum americanum*)
Jamaican Dogwood (*Pocididia erythrina*)
Lobelia (*Lobelia inflata*)
Pulsatilla (*Anemone pulsatilla*)

**Digestive Bitter**
Blue Vervain (*Verbena bastata*)
Hops (*Humulus lupulus*)
California Poppy (*Eschscholzia californica*)
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Chamomile (Matricaria recutita)
Motherwort (Leonurus cardiaca)
Mugwort (Artemisia vulgaris)
Skullcap (Scutellaria lateriflora)
Wood Betony (Stachys officinalis)
Wild Lettuce (Lactuca scariola)

Digestive Carminative

Catnip (Nepeta cataria)
Chamomile (Matricaria recutita)
Lemon Balm (Melissa officinalis)
Valerian (Valeriana officinalis)

Respiratory

Black Cohosh (Cimicifuga racemosa)
Lobelia (Lobelia inflata)
Motherwort (Leonurus cardiaca)
Wild Lettuce (Lactuca virosa)

Reproductive (primarily female)

Black Haw (Viburnum prunifolium)
Crampbark (Viburnum opulus)
Kava-Kava (Piper methysticum)
Motherwort (Leonurus cardiaca)
Pulsatilla (Anemone pulsatilla)
Valerian (Valeriana officinalis)
Skullcap (Scutellaria lateriflora)
Black Cohosh (Cimicifuga racemosa)

Nervines By Temperature

Cooling

Blue Vervain (Verbena hastata)
California Poppy (Eschscholzia californica)
Chamomile (Matricaria recutita)
Hops (Humulus lupulus)
Lemon Balm (Melissa officinalis)
Motherwort (Leonurus cardiaca)
Mugwort (Artemisia vulgaris)
Passionflower (Passiflora incarnata) ever so slightly, I consider it neutral
Skullcap (Scutellaria lateriflora)
Wild Lettuce (Lactuca virosa) - Note: it is cooling in higher doses, treats cold in low doses

Warming

Catnip (Nepeta cataria)
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Kava-Kava (*Piper methysticum*)
Rosemary (*Rosmarinus officinalis*)
Valerian (*Valeriana officinalis*)
Wild Lettuce (*Lactuca virosa*) - Note: this is only with low doses (1-3 drops)

### Specific Indications and Differentials of Nervines

<table>
<thead>
<tr>
<th>Plant</th>
<th>Energetics</th>
<th>Specific Indications</th>
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</thead>
<tbody>
<tr>
<td>Hops (<em>Humulus lupulus</em>)</td>
<td>Cooling</td>
<td>Nightmares. Excess sexual energy (anaphrodisiac) Redness in the face, digestive upset due to malfunctioning secretions. Most bitter of the hypnotics.</td>
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<tr>
<td>Passionflower (<em>Passiflora incarnata</em>)</td>
<td>Cooling (relatively mildly)</td>
<td>Good for fragile constitutions and the elderly. Cycling repetitive thought patterns and mental chatter- “mind driving you crazy.” Red tipped tongue</td>
</tr>
<tr>
<td>Valerian (<em>Valeriana officinalis</em>)</td>
<td>Warming</td>
<td>Pale face, cold extremities, insomnia. Contraindicated with pitta and heat signs (red face). General strong hypnotic. Specific for benzodiazepine withdrawal</td>
</tr>
<tr>
<td>Blue Vervain (<em>Verbena hastata</em>)</td>
<td>Cooling</td>
<td>Workaholic, overly driven, overachiever, works into the ground- stressed and tense. Headaches. Neck and shoulder tension.</td>
</tr>
<tr>
<td>Chamomile (<em>Matricaria recutita</em>)</td>
<td>Cooling</td>
<td>Whiny, complaining, acting childish. Over expresses things and blows them out of proportion- the slightest pain is a major deal. The adult who acts like a child.</td>
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<tr>
<td>Lemon Balm (<em>Melissa officinalis</em>)</td>
<td>Cooling post digestive, slightly warming predigestive</td>
<td>Heart palpitations. Takes things too seriously, know it all, stiff and rigid, high stress and focused on achievement, needs child-like quality, to sit back and enjoy life, cultivate innocent perception.</td>
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<tr>
<td>Kava-Kava (<em>Piper methysticum</em>)</td>
<td>Warming</td>
<td>Social anxiety, awkward people who feel closed off to others. Can’t relax into social situations. Rigid and stiff in body. Back pain. Urinary tract issues, chronic UTI’s, or stones.</td>
</tr>
<tr>
<td>Catnip (<em>Nepeta cataria</em>)</td>
<td>Warming/Cooling</td>
<td>Internalizes emotions and holds things in, “the quiet child.” Juxtaposed to Chamomile, who externalizes every little thing and blows it out of proportion.</td>
</tr>
<tr>
<td>Wood Betony (<em>Stachys betonica</em>)</td>
<td>Cooling</td>
<td>Headache, tension in neck and shoulders. Students. Ungrounded, spaced out, smoking too much ganja, crown chakra excess, digestive upset- vital force goes up and out excessively. Too spiritually focused and isn’t in touch with reality and practical obligations, or just too much mental activity</td>
</tr>
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