HERBS FOR HORSES

Author: BILL VANDERGRIFT (Courtesy of Alltech Inc.)

The use of herbal products in equine diets is gaining popularity rapidly. The reasons for this are several, but center around a changing makeup of the horse owner population. First, there are a greater number of horse owners with fewer than five horses than there were 15 to 20 years ago. Participation in equine sporting events has also increased, which has resulted in increased moneys being paid out by these people for successful horses. The net result of these two factors is that horse owners are willing to pay more for products that they believe will help their horses compete successfully in the highly competitive world of horse shows and horse racing.

Secondly, the number of equine health-related problems reported by horse owners has also increased substantially over the past 15 to 20 years. As average horses are pushed to compete at higher and higher levels, the number of horses experiencing musculo-skeletal and respiratory function disorders has increased. Unfortunately, traditional veterinarian medicine has not been able to make significant progress towards treating many of these horses; so in part out of desperation and in part out of a renewed respect for alternative therapies, the use of herbal products, homeopathy, acupuncture, massage therapy, chiropractic care and even aromatherapy has increased dramatically.

Background

Herbs have been used in human and animal medicine for thousands of years. The ancient Egyptians, Greeks and Chinese all left records that describe their use of various plants in the treatment of disease. In more modern times, Native Americans and indigenous people around the world all use herbs and various plant preparations in traditional medicine. Health food stores and even grocery stores now have dedicated shelf space for herbal preparations.

Still, many traditional nutritionists, veterinarians and physicians remain skeptical about the use of herbal preparations in equine and human diets. Little do they know, however, that they are most likely using herbal preparations on a daily basis themselves without realizing it.

Common spices and foods such as garlic, thyme, horseradish, raspberry, and mustard can all be considered herbs. They have just become so widely accepted as normal dietary components that their herbal properties have been forgotten. In fact, if you have ever eaten prunes or rhubarb for their laxative properties, you have utilized herbal medicine.

A herb is simply any plant that is valued for its medicinal, aromatic or flavoring properties. Most herbs used in equine and human applications are valued for their medicinal properties; however, the herbal components that contribute to their medicinal value are difficult to regulate or standardize.

Additionally, many herbal products contain more than one herb; and we find that individual horses as well as individual people sometimes respond differently to a particular herbal preparation. The active ingredients of individual herbs that provide a medicinal effect have been determined for some herbs and actually provide a basis for many of today’s modern medications (i.e., aspirin from willow and ephedrine from the Chinese herb Ma Huang). However, the active agents in many herbal preparations that have proven themselves effective over time are still not well understood.
Basic components of herbs, dosages

Most herbs provide their beneficial effects due to the presence of one or more of the following components:

**Alkaloids.** Alkaloids are common to many plants and form the basis of many modern drugs such as morphine, atropine and codeine.

**Bitters.** Bitters are primarily used as digestive aids since they tend to stimulate the secretion of gastric juices. However, others are noted for their sedative or antimicrobial properties.

**Flavenoids and bioflavenoids.** Herbs containing flavenoid-like components are primarily used for diuretic, antispasmodic and anti-inflammatory purposes. For this reason, they are especially useful in the treatment and prevention of colic in horses.

**Glycosides.** Some herbs contain extremely powerful glycosides. For example, foxglove contains digoxin, a component of the very powerful heart drug digitalis, which can cause death by producing heart spasms if taken in large doses.

**Mucilage.** Mucilaginous substances found in various herbs are noted for their ability to form gel-like substances in the gastrointestinal tract when ingested. They are favored for their ability to soothe inflamed intestinal tissue and provide mild laxative effects.

**Saponins.** Various herbs contain steroidal-like saponins that are used as blood tonics and in aiding wound healing (i.e., liquorice root contains a cortisone-like saponin).

**Tannins.** Herbal tannins primarily act as astringents.

While very specific constituents of individual herbs have been identified as providing specific medicinal effects, the medicinal action of most herbs is provided by the presence of not only the primary chemical component, but also secondary components which are not as easily identified. Herbalists believe that for herbs to provide their greatest effect they should be administered whole in order to provide an effective dose of both primary and secondary constituents.

Additionally, when individual horses or people experience an adverse reaction to a particular herbal preparation, it is often the secondary constituents that cause the reaction. The presence of secondary constituents that act to increase the effectiveness of primary herbal components is the logic behind the common and usual practice of administering multiple herbs in order to achieve a single purpose.

PREPARATIONS AND DOSAGES

Herbs are usually administered to horses in one of four ways:

1. dried herb is mixed with hay or grain.
2. a herbal tea is prepared and administered via drinking water or oral syringe.
3. a poultice is prepared and herbal mixture is applied externally to the affected area.
4. a gel, paste or vaporizer is prepared and herb is administered aromatically.
Since the concentration of primary components of most herbal products is not well standardized, the usual dosage recommendation is to provide the equivalent of a standard measure of dried herb. In order to avoid overdosing of secondary constituents, the dosage provided per day is often the same regardless of whether a single herb is given or a herbal mixture. For horses and ponies, recommended daily doses usually range between 20 and 30 g per horse per day.

**COMMON HERBS USED IN EQUINE APPLICATIONS**

Most herbal preparations used for horses are designed for specific applications.

Common uses include digestion aids, normalizing hormonal fluctuations in mares and stallions, temperament adjustments, bone and joint therapy, respiratory therapy, muscle therapy and recuperation from exercise, and to give a general sense of well being via antimicrobial activity and immune system stimulation.

The remainder of this section will discuss individual herbs commonly used in equine diets. For simplicity, they are arranged in alphabetical order under specific function headings. Note that some herbs appear under more than one function heading.

**HERBAL DIGESTION AIDS**

**Aloe vera.** Juices from the Aloe vera plant contain anthraquinone derivatives which are converted to emodin in the intestine. At low doses (10 mg) Aloe vera acts as a digestive bitter, at moderate doses (100 mg) it works as a laxative and at higher doses (1,000 mg) Aloe vera acts as a purgative. Effectiveness is not lost with continuous use.

**Aniseed.** Dried seeds are commonly used to stimulate appetite and the secretion of digestive juices. Therefore, aniseed is used to treat poor appetite and digestive disorders such as colic.

**Burdock.** The root of the burdock is a digestive bitter and stimulates liver function. It is especially useful for horses that exhibit poor feed utilization and(or) reduced appetite.

**Celery seed.** Celery seed provides a warming effect and acts as a digestive bitter. It is useful for horses that have become ‘run-down’ as a result of transportation, overwork and exposure to cold.

**Fenugreek.** Fenugreek contains steroidal saponins that can help horses put on condition as well as act to stimulate appetite and reduce complications caused by gastric ulcers.

**Golden Rod.** The leaves and flowering tops of Golden Rod have antiinflammatory and astringent effects and can be used in horses exhibiting an irritable bowel.

**Lemon Balm.** Lemon Balm has a sedative effect on the gastrointestinal tract and is therefore useful for helping horses with chronic mild colic.

**Licorice.** Licorice has been used for over 3,000 years as a digestive aid. The active ingredient in licorice is glycyrrhizin. Licorice reduces gastric acid secretion and is recommended for use in horses with gastric ulcers.
Marigold (Calendula). Marigold is rich in sulfur and is valued for its ability to help heal gastric ulcers.

Meadowsweet. Meadowsweet contains salicylic acid and is known as herbal aspirin. Meadowsweet has astringent actions and has proven especially useful in treating ulceration caused by such drugs as phenylbutazone.

Mint. Mint contains flavonoids that act to relax the digestive tract. Mint is commonly used as a general digestive aid in horses. Horses also find the aroma and taste of mint to be particularly appealing.

**HORMONE EFFECTORS**

Aniseed. Aniseed has estrogenic activity and can be used to help normalize estrus in mares.

Chaste Tree. Seeds from the Chaste Tree have been used for almost 2,000 years to help menopausal women and women suffering from pre-menstrual syndrome. It is considered an anti-aphrodisiac and hence received the nickname ‘Monk’s Pepper’. Mares exhibiting performance problems during estrus have benefited from receiving Chaste Tree.

Licorice. Licorice has estrogenic activity and has been used to help increase fertility in mares.

Parsley. Parsley stimulates milk production in mares. Because parsley also stimulates uterine contractions it should not be given to pregnant mares.

Raspberry. Raspberry assists uterine contractions during foaling, aids in placental cleaning and reducing hemorrhage associated with the foaling process.

Sage. Sage has been used to depress milk production in mares. In addition, sage is a relatively strong uterine stimulant and therefore should not be given to pregnant mares.

**TEMPERAMENT MODIFIERS**

Clover. Clover has been used for its sedative and calming action for decades; however, it has also been used as a tonic for horses that are in poor condition due to illness.

Chamomile. Chamomile is used as a sedative for horses that are high strung due to nervousness or stress.

Lemon Balm. Lemon Balm has sedative effects and is often used in combination with chamomile to calm nervous horses.

Poppy. More specifically the corn poppy is used as a sedative for nervous horses. The opium poppy is distinct from the corn poppy and is not recommended in equine diets due to narcotic-like components that will show up in blood tests under competition rules.

Valerian. Valerian is commonly used in sweets and soft drinks. Valerian has a sedative effect on horses; however, it is especially favored by those managing performance horses due to its ability to calm nervous horses without hindering ability to perform. It is also used widely to aid recuperation in horses suffering from nervous fatigue. Valerian may be banned in sport horses in the United States due to its ability to affect performance of horses.

Vervain. Vervain is commonly used to help keep horses calm during recuperation.
BONE AND JOINT THERAPY

**Buckwheat.** Buckwheat is a relatively strong vasodilator and can aid in the treatment of arthritis due to its ability to help repair capillaries.

**Clivers.** Clivers is slightly diuretic and is commonly used to treat horses with swollen legs and joints.

**Comfrey.** Comfrey contains allantoin, which stimulates cell production. It has been used for decades to heal bones, cartilage and connective tissue. Comfrey is also anti-inflammatory and is used as a treatment for arthritis.

**Devil’s Claw.** The anti-inflammatory and analgesic effects of Devil’s Claw have been reported to be equal to cortisone and phenylbutazone without the noted side effects such as gastric ulceration. Devil’s Claw is often used to aid in the healing of degenerative bone disease and developmental orthopedic disease. Note that even though Devil’s Claw may not cause gastric ulcers, it should not be used when gastric ulcers are present or suspected.

**Nettle.** Nettle is a mildly strong stimulant of the circulatory system and is therefore recommended for laminitis or arthritis.

**Kelp.** Kelp or seaweed is a rich source of trace minerals that aid in cartilage and connective tissue formation. Therefore it is generally recommended for growing and performance horses as well as pregnant broodmares.

MUSCLE AND EXERCISE RECUPERATION THERAPY

**Buckwheat.** Buckwheat vasodilatory properties aid in muscle function and exercise recuperation.

**Celery seed.** Celery seed helps relieve joint stiffness and has a warming effect which makes it useful for horses that are a bit sore following a hard workout.

**Clivers.** Clivers is excellent for toning the lymphatic system, especially when combined with marigold. Therefore it is widely used in horses that exhibit muscle tightness during exercise.

**Chamomile.** Chamomile possesses anti-inflammatory, analgesic, and vasodilatory properties and is quite effective at treating muscle soreness during and after exercise.

**Dandelion.** Dandelion is diuretic as well as a rich source of potassium, magnesium, calcium and vitamins A, C, and B complex. Dandelion use will help cleanse the blood in horses after exercise and provide needed levels of potassium, magnesium and calcium during exercise.

**Marigold.** Marigold has historically been known as a blood tonic that also has anti-inflammatory properties. Used with clivers, marigold can help prevent muscle tightness during exercise.

**Nettle.** Nettle is a rich source of sodium and has a stimulatory effect on the circulatory system. Nettle is excellent for horses competing in very strenuous or power-demanding activities.
**Kelp.** The trace mineral composition of kelp helps the horse increase its anti-oxidation activity during and after exercise. Minerals needed for co-enzyme functions in the metabolism of protein and energy are also provided by kelp.

**Vervain.** Vervain has antispasmodic properties and helps to steady the nervous system after illness or hard exercise.

**RESPIRATORY THERAPY**

**Aniseed.** Aniseed has expectorant properties and is recommended for horses with chronic coughs.

**Garlic.** Garlic is one of the most popular herbs used in horse diets. Garlic has expectorant and antibiotic properties that make it very useful as a prophylactic as well as a treatment for horses with respiratory tract irritation.

**Golden Rod/Echinacea combination.** Golden Rod in combination with Echinacea is an excellent anti-inflammatory and astringent making the combination useful for horses with respiratory congestion.

**Marshmallow.** Marshmallow has expectorant, relaxing and mucilagenous properties which make it valuable for use in herbal mixtures designed for horses with coughs and respiratory congestion.

**ANTIMICROBIAL AND IMMUNE STIMULATORS**

**Echinacea.** Echinacea is fast becoming one of the most popular herbs used in equine diets and is one of the most effective immunostimulants for horses available. Echinacea provides antiviral, antibacterial, anti-inflammatory, immunostimulant and wound healing properties. Echinacea has proven to be highly effective as a prophylactic against infection in show and race horses that are constantly exposed to viruses and bacterial agents.

**Garlic.** Garlic has antibacterial properties and can be used as an aid in treating and preventing skin problems due to insect bites and fungal agents.

**Radish.** Radish seeds contain raphanin, which has antibacterial activity against a relatively wide range of bacteria. It is primarily used a general prophylactic against infection.

**Precautions on the use of herbs in equine diets**

Though herbal preparations have been used in equine diets for centuries and their effectiveness proven on the basis of repeatability over time, the active agents in many of the herbs are still ill-defined. It should be remembered that, unlike modern medicines, herbal preparations often provide their effective action due to a multitude of agents present and not due to one specific concentrated and purified chemical.

As a result, individual horses can sometimes have quite opposite reactions to a particular herbal preparation than what is expected. Therefore, care and caution should always be taken when first introducing a herb or herbal mixture to an individual horse. The morning of the show is not the time to try out a new herb on your horse.
As discussed above, some herbs can have very powerful actions in the horse and should be used with care. Many times horses will voluntarily reduce feed intake or refuse to ingest more of a particular herb. This is an instinctive reaction by the horse resulting from its body informing it that it no longer requires the agents found in the particular herb and(or) his body now contains a sufficient amount of the agent.

Since elevated doses of some herbs can stimulate undesirable side effects, it is usually not wise to force such a horse to consume additional doses, especially without first consulting a medical professional.

As the use of herbs in equine diets has become more popular, the use of some herbs has been declared ‘doping’ by various sport horse and race horse regulatory agencies in various countries. For example, rosemary is considered a stimulant and is banned under Jockey Club and Federation Equestre Internationale rules.

While still legal at the time this paper was prepared, valerian is under consideration for regulatory action in the United States due to its seeming performance enhancing properties. Therefore, due to constantly changing attitudes and regulations concerning the use of herbs, the horse owner and trainer should consider themselves to be ultimately responsible for the use of various herbal products.

As a general precaution, it is recommended that most herbal products be removed from the horse at least ten days prior to competition in order to avoid unintentional violation of ‘doping’ or drug use rules.

Since many herbs can have hormonal properties and(or) effects on uterine or mammary tissue, care should be taken before giving herbs to pregnant or lactating mares. Someone knowledgeable should be consulted if there is any uncertainty.

**CHINESE HERBAL VETERINARY MEDICINE**

Traditional Chinese veterinary medicine has used herbal remedies for horses for more than 1,000 years. Their herbal applications are more sophisticated and more extensive than western herbal remedies. In a recent paper published by Xie et al. (1997) 19 different herbal preparations were described for the treatment of chronic diarrhea in horses.

The reason for 19 different preparations is that traditional Chinese medicine is based on re-establishing energy flow systems within the body. There are 12 energy flow systems within the body each pertaining to a different bodily function. This tradition also classifies diseases according to ‘pattern’, which is simply a classification system.

Matching the specific herbal remedy or energy flow system to the ‘pattern’ is the goal of Chinese herbal veterinary medicine.

Traditional Chinese veterinary medicine divides chronic diarrhea into three different patterns (blood, spleen and kidney) and six pathogenic factors (cold, heat, damp, dryness, summer heat and wind). Blood, spleen and kidney are used differently in traditional Chinese medicine than they are in western medicine.

In traditional Chinese medicine blood, spleen and kidney refer to energy flow systems within the body that can be affected by different herbal remedies. By determining which disease pattern is affecting the horse based on physical examination, the traditional Chinese medicine approach can then match a particular herbal remedy with the most prominent pathogenic factor determined by examination and observation.
The results achieved with Chinese herbal medicine when combined with acupuncture often surpass western medicine. Chronic diarrhea in horses is one of the most difficult disease states for western medicine to cure; however, the traditional Chinese veterinary medicine approach when applied correctly appears to enjoy a 90% or better rate of success. Unfortunately, Chinese herbs are not readily available in the United States and the knowledge for their appropriate use is lacking.

**References**


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**HERBS FOR ANIMALS**

by Helen Massingham-Howells

On reflection perhaps I should have called this piece Herbs for Horses! Nearly all of these remedies were used by the European Gypsies and they have proven their effectiveness through many generations. I am sure that you, too, will them helpful.

Most horses will take herbs when mixed with molasses or honey. Many times a brew with strong tasting herbs can be disguised with black currant syrup or honey, particularly if cider vinegar has been added.

Hops (Humulus lupulus) "Hop tops" young shoots given to colts to condition them. A good tonic. Flowers fed in fodder to quiet restless animals, 1 or 2 cups for young animals, 2 or 3 cups (1 cup equals 1 handful) for adults.

Ivy, Common (Glechoma Hederacea) Very good for internal cleansing after birth, 1 to 2 cups chopped herb for mares immediately after giving birth. In treating retained afterbirth make a strong brew; in 1 pint of water add 1 to 2 cups of common Ivy half pint drenches approximately every 3 hours. Do not confuse with Poison Ivy please!

Lady’s Mantle (Alchemilla vulgaris) Horses like this herb so do sheep and goats. A good tonic. Parsley piert or Alchemilla arvensis is a gypsy cure for stones and a tonic after treating colic. It has been said that should man or animals take this herb on mid summers eve they could become invisible!! I have not tried that one, maybe one would have to take Woad (Ivatis tinctoria) to bring one back in sight. Of course the bluish hue might startle a few animals and people!
Meadowsweet (Filipendula ulmaria) Used by gypsies as a spring tonic for horses, 1 to 2 cups of flowers cut up and mixed with mash or corn brew in 1.5 pints of water

Nettle, Common (Urtica dioica) Good forage dried for horses, rich in minerals, lime, sodium, iron, chlorine and a naturally good in protein value. Nettle juice mixed with nettle seeds is a good hair tonic: use internally 1 cup of juice in the animals mash. Use externally to wash the coat, it will give it a beautiful shine, beneficial for show or racehorses.

Oak (Quercus robur) Gypsies used the ripe acorns ground and dried them and mixed them with wheat flour to make a gruel. The green cups are very astringent and made into a strong brew are used to check bleeding internally and externally, 1 to 2 oz to 1.5 pints water.

Poplar, Black (Populus nigra) Buds crushed in milk, honey and wine a good tonic for horses. For sores, wounds, ulcers. Used externally too (by making an ointment with the young buds).

Puffball (Fungus) Used to stem bleeding and promote healing. Crushed and then applied to wounds.

Quince (Pyrus Cydonia) Hair tonic for manes and tails. The peel is made into a brew 1 cup to 1 pint.

Sanicle (Sanicula europaea) Used as a talisman on banners and shields to protect war-horses and hopefully their riders. Good fodder. Effective for internal bleeding and wounds. Whole plant used make a brew or give 1 to 2 cupfuls of the herb in feed.

Scabious (Scabiosa arvensis) (Gypsy Rose) Cleansing and antiseptic. A brew of the root and herb thickened with borax, removes old sores and dandruff. Mix about 2 cups herb and root to one and a half pints water. Put in 1 tablespoons of borax powder while still hot and stir well. Apply when cooled.

Strawberry or Wild Strawberry (Fragaria vesca) Leaves help prevent abortion, fruit good for nervous or slow horses. Foliage good for show and racehorses. 2 cups of leaves or leaves and root daily or handful of berries daily.

Sweet Cicely (Myrrhus odorata) Horses love this herb. A good tonic. Crush some or bruise the root and hold in the hand, they will usually come to one. Native Indians used this trick to catch the wild horses. Note make sure you catch the right horse!

Tea Plant (Thea sinensis) (Indian tea, China tea), Make a strong infusion, 2 parts to 1 of vinegar, (cider if possible). Soak cotton cloth when cold and apply. Very good for sun stroke, sunburn, fine burns. Dose internally: 1 dessert-spoon cider vinegar to 3 tablespoons tea mixture. Make the tea mixture with 2 tablespoons in 10 oz. hot water, add a pinch of cinnamon or 1 to 2 cloves or both. Give cold if possible.

Willow, White (Salix alba) Young shoots and foliage given by gypsies for cattle and horses as a tonic

Willow (Salix caprea) Given to goats to calm their hot tempers and cool their blood. I am not sure whether that means they gave it to the old goats or not. What is good for the animals is good for man too!

It's easy to forget that the "beasts of the field" originally taught us much of our herb law, (by our observations of them). They deserve more consideration than we often care to give them nowadays. By using these simple remedies we can do much to make their lives more comfortable and productive.

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