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Western Botanical Medicine for Small Animals A Pathway to Integrative Veterinary Care

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A Pathway to Integrative Veterinary Care

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KEYWORDS

• Botanical medicine • Herbal medicine • Phytomedicine • Secondary metabolites • Synergy • Whole plant • Multitargeted

KEY POINTS

- Veterinary botanic medicine integrates the traditional use of plants with a research-supported understanding of their mechanisms, efficacy, and safety, supporting their use in veterinary practice.
- Vetertinary botanical medicine principles include addressing pathophysiology while optimizing physiology and using whole herbs rathert than isolated consituents.
- Herb-drug interactions matter in veterinary practice; they may alter drug efficacy, potentiate side effects, or offer beneficial effects. All herbs may interact to some extent.

BACKGROUND

Botanical medicine, herbal medicine, and phytomedicine refer to the application of whole plants, plant extracts, and isolated phytochemicals to prevent, manage, and treat diseases. The scope for botanical medicine in veterinary practice is expansive and includes applications in disease prevention, health promotion, and therapeutic intervention in cats and dogs.[1] Botanical medicine aligns closely with integrative veterinary care, which seeks to combine the strengths of conventional medicine with complementary therapies to enhance clinical outcomes. By harnessing the complexity of plants, botanical medicine offers a distinct therapeutic approach, particularly for chronic and multifactorial conditions where poly-pharmacologic effects of herbs are beneficial. A knowledge of phyto-pharmacology helps explain how herbs work, and knowledge of traditional herb use helps inform their research, application, and efficacy. By incorporating botanical medicine into small animal practice, veterinarians can expand their therapeutic toolkit, offering safe, effective, and individualized care.

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Abbreviations	
MCT	mast cell tumor
RCT	randomized controlled trial

HISTORIC AND CULTURAL FOUNDATIONS

Herbs have long been integral to veterinary medicine, dating back to the profession's formalization in 17th-century Europe. Historic texts like Edinburgh Veterinary College's Dr Finlay Dun's 1854 *Veterinary Medicines: Their Actions and Uses* highlight the foundational role of botanical remedies, employing terms like demulcent, tonic, nervine, and purgative—terminology that remains part of the herbal lexicon today. Preparations, such as decoctions and tinctures, were routinely used and constituted the professional language of veterinary practice throughout the 19th and early 20th centuries. Herbs also played an important role in the history of veterinary medicine in North America. Dr James Law trained at Edinburgh Veterinary College and went on to establish Cornell Veterinary College teaching from 1868. His textbook Veterinary Medicine published in 1896 also contains *Materia Medica* on the use of plant medicines as the orthodox medicines of the day.

Dr Dun's 1854 edition provides a detailed account of chamomile (*Matricaria recutita*), describing its bitter taste, aromatic odor, and active constituents, such as volatile oil and tannins. Chamomile remains a widely used medicinal plant in both human and veterinary medicine today with therapeutic properties confirmed by contemporary studies including anti-inflammatory, antimicrobial, antioxidant, antispasmodic, chemopreventative, antiplatelet, antiparasitic, neuroprotective, antiulcer, antipruritic, sedative, antidiarrheal, wound healing, immunomodulating, and anxiolytic activities.[2]

Many botanicals, such as ginger *(Zingiber officinale)*, aloe *(Aloe vera/barbadensis)*, peppermint *(Mentha* x *piperita)*, cascara *(Frangula purshiana)*, senna *(Cassia senna* synonym *Senna alexandrina)*, and linseed *(Linum usitatissimum)*, were integral to veterinary pharmacopoeias and medical texts well into the 1960s. These examples underscore the historic orthodox nature, continuity, and utility of botanicals in veterinary practice.

THE CASE FOR BOTANIC MEDICINE IN VETERINARY PRACTICE

The use of pet supplements in the United States (USA) has surpassed $2.7 billion in sales[3] in 2023. Of this the pet herbal supplements market in the USA is estimated at $288 million in sales with a compound annual growth rate expected to exceed 10%.[4] Growth is due in to increased awareness among dog owners regarding the health benefits of herbal supplements.[5] For example, herbal calming products for stress (e.g., valerian root *[Valeriana officinalis]*) are increasingly preferred by pet owners over pharmaceuticals. According to the 2023 to 2024 American Pet Products Association National Pet Owners Survey, 53% of cat owners use herbal calming products, indicating a significant adoption of herbal supplements aimed at stress reduction.[6] A recent survey revealed that more than 75% of surveyed dog owners and 22% of cat owners in the USA have administered cannabidiol to their pets mainly for anxiety and stress and joint pain and inflammation.[7] Pet owners are driving demand, often turning to herbal medicine and purchasing without veterinary consultation.

The pet food industry is also increasingly incorporating herbal extracts or phytochemicals into pet foods to meet growing consumer demand for natural, functional

ingredients that support pet health.[8] Pet owners are becoming more educated and health-conscious, seeking foods that not only provide basic nutrition but also offer added benefits like boosting immunity, supporting digestion, and promoting overall wellness and herbs are perceived as safe, natural, and effective.[8]

As veterinary medicine continues to evolve, the use of botanical medicine in practice is also gaining traction due to mounting evidence supporting the efficacy, safety, and utility of herbal treatments for chronic disorders, to prevent illness or to treat conditions when conventional treatments do not work.[9] In a survey of small animal practitioners in Spain, widespread use of botanical medicine has been demonstrated with most veterinarians showing a positive attitude toward herbal medicines:83.1% were in favor of using medicinal plants with 80.3% of those surveyed having used phytotherapy, 5.1% were against their use, and 11.8% did not answer.[1] Another survey reported 79% of veterinarians used herbal products in acute diseases, 45% in chronic disorders, and 50% as prophylactic therapy.[10] Herbal medicine is particularly valuable in small animal practice for managing complex, chronic conditions, such as digestive, skin, musculoskeletal, and immune-mediated diseases, where conventional treatments may be insufficient or problematic due to the multifactorial nature of these disorders. By addressing the intricate pathophysiologic processes often beyond the scope of standard drugs, botanic medicine can offer a multi-targeted therapeutic strategy.[11]

PRINCIPLES OF VETERINARY BOTANICAL MEDICINE

The principles of veterinary botanical medicine include addressing the pathophysiology or imbalance, supporting the body's innate healing processes and using whole herbs rather than individual constituents. Botanical medicine emphasizes the use of whole-plant preparations to achieve a synergistic effect, drawing on traditional knowledge of their use with scientific evidence for phytopharmacology, mechanisms of action, safety, and efficacy. Practitioners also prioritize ethical sourcing of herbs and the avoidance of endangered plant species. The goal is to provide gentle, supportive care while minimizing potential adverse events and enhancing the overall quality of life for animals.

Practitioners start with a diagnosis and treatment goals for each patient. From here they consider the herbal actions that will alter relevant physiology and pathophysiology. These actions may be anti-inflammatory, anti-microbial, antioxidant, anti-fibrotic, anti-neoplastic, anti-hypertensive, adaptogenic for example, or more traditional actions, such as nervine, digestive, alterative, trophorestorative—terms used to describe more broad-spectrum actions that improve physiology and organ function. With knowledge of the herb's constituents, actions, indications, contraindications, herb-drug interactions and dosing, a veterinarian can prescribe safely.

THE WHOLE HERB

Herbal medicines are prepared as the crude extracts of the whole or part of a plant, such as the roots, which have been dried and/or extracted typically in water or aqueous solutions of ethanol, vinegar, or glycerine. Tablets can be made from compressed extracted herbs and capsules from extracted or dried herbs. It is important to know the concentration of the product and the dried herb equivalent (DHE) to calculate dose.

The whole herb is inherently complex, containing thousands of phytochemicals—a mixture of both primary and secondary metabolites. Primary metabolites include vitamins, minerals, proteins, and carbohydrates (including polysaccharides) while active

constituents, such as alkaloids, flavonoids, tannins, saponins, terpenes and terpenoids, glycosides and essential oils, are classified as secondary metabolites. The latter play a role in the plant's ecologic interactions, including defense mechanisms, chemical signaling, and protection against environmental stressors like ultraviolet radiation and oxidation.

Highly active compounds with high selectivity are potent phytochemicals that target specific cellular pathways but may have a higher risk of toxicity. Although they are less commonly used in veterinary practice, these compounds are often the focus of natural product research for pharmaceutic drug development.[12] Botanic medicine on the other hand focuses pharmacognosy not in the context of isolating constituents for drug discovery, but rather to validate traditional medicine and understand the mechanisms behind herbal efficacy. Historically though, veterinarians did use herbs with toxic alkaloids, such as *Atropa belladonna* (a source of atropine) and strychnine (*Strychnos nux-vomica*) and digitalis *(Digitalis purpurea)* being notable examples.

Approximately 90% of thoroughly described medicinal plants have moderately or weakly active phytochemicals with broad-spectrum effects. These compounds exhibit "molecular promiscuity", interacting with a broad range of cellular targets to produce broad therapeutic effects with minimal toxicity.[13,14] Botanical medicine therefore distinguishes itself from isolated compounds or single-target pharmaceuticals by its ability to provide multi-target and synergistic actions.[15]

The concept of synergy, that the whole/or part of the plant and its extract offers greater therapeutic value than isolated constituents is fundamental to the principles of botanical medicine. For instance, in an *in vitro* study investigating the activity of turmeric (*Curcuma longa*) against *Toxocara canis*, the 3 major curcuminoids—when tested individually—were found to be ineffective. However, combinations of 2 or 3 curcuminoids exhibited activity, with the full combination of all 3 demonstrating the highest efficacy.[16] Another example is artemisinin, an isolated active constituent from sweet annie *(Artemisia annua)* widely used to treat malaria in humans and suggested as a cancer treatment in pets. It has been found that the dried whole-plant sweet annie is more effective than purified artemisinin in overcoming malaria drug resistance.[17] Additionally, it has been found that after oral administration, bioavailability of artemisinin in the bloodstream was lower by more than 40 times compared to the whole plant extract.[18] This highlights how the whole plant, with its diverse phytochemical profile and synergistic relationship between the plant constituents may aid in the bioavailability and therapeutic effect compared to the use of single isolated compounds.[19]

EVIDENCE BASE FOR BOTANIC MEDICINE

In evidence-based medicine, a variety of study types help to assess the effectiveness and safety of botanical medicines. Clinical observations and case reports can form an essential starting point for advancements. For example, the anticancer effects of longevity spinach *(Gynura procumbens)* leaves were described in a case report of a chihuahua with recurrent multiple cutaneous mast cell tumor (MCT) grade III. Following excision and 9 rounds of chemotherapy recurrent, MCT disease was observed 3 mo later. This time the owner initiated the traditional herb, and the tumor shrunk and was completely gone after several months, without any evidence of micrometastasis or need for further chemotherapy.[20] As such, this type of clinical observation can provide a starting point for further research and validation.

Cohort studies provide additional evidence, though they lack randomization.[21] Randomized controlled trials (RCTs) are more rigorous; however, many veterinary RCTs still have inherent bias with significantly higher proportion of positive outcomes

reported in RCTs funded by pharmaceuticals (56.9%) compared to those with no funding (34.9%).[22] Ideally multiple RCTs of an intervention, meta-analysis, and systematic reviews allow pooling of data to improve reliability of findings. Increasingly, published studies have validated the therapeutic benefits of certain herbs in veterinary medicine in RCT with more researche needed.

HERB-DRUG INTERACTIONS

Herb-drug interactions are an important consideration in veterinary practice. While it is reasonable to expect that all herbs may interact with medications to some degree, these interactions can be beneficial or can alter drug efficacy and increase the risk of side effects.

A RCT in dogs evaluated the effects of licorice *(Glycyrrhiza glabra)* root powder capsules and an herbal solution containing saponaria root *(Saponaria officinalis)*, thyme *(Thymus vulgaris)*, Icelandic lichen *(Cetraria islandica)*, and hyssop *(Hyssopus officinalis)*. Endoscopy and colon biopsies were conducted before and after 21 d of treatment with 3 regimens: robenacoxib alone (group 1), robenacoxib combined with the herbal solution and licorice extract (group 2), and a placebo capsule (group 3). Each group included 5 animals. The results revealed that the most significant microscopic damage to the colon occurred in the robenacoxib-only group. However, the addition of licorice plus herbal solution significantly reduced the severity of colonic lesions when co-administered with robenacoxib.[23] Licorice and the same herbal solution also reduced the severity of non-steroidal anti-inflammatory drugs (NSAID) induced mucosal lesions in an RCT of 35 dogs given carprofen or robenacoxib in an earlier study.[24]

A RCT involving 20 dogs examined the protective effects of various supplements against dexamethasone-induced hepatopathy. The dogs were randomly divided into 4 groups: Group I received dexamethasone alone; Group II received dexamethasone along with concentrated milk thistle *(Silybum marianum)* and esomeprazole; Group III received dexamethasone with L-carnitine; and Group IV received dexamethasone with licorice powder and esomeprazole. The results indicated that milk thistle, licorice, and L-carnitine all provided protective benefits, with milk thistle and L-carnitine being more effective than licorice.[25]

In a RCT, 5 of 25 dogs administered gentamycin were given silymarin once daily for 9 d. The protective effect of silymarin against gentamycin-induced nephrotoxicity was demonstrated and may in part be due to antioxidant activity.[26]

With early intervention, silymarin can protect liver tissue from hepatotoxicity in cats overdosed with tetracyclines, mebendazole, and acetaminophen.[27–29]

In an RCT, 15 previously unvaccinated dogs were either treated with echinacea *(Echinacea purpurea)* daily for 28 d and vaccinated at day 7, or echinacea and injected with saline instead of vaccination or no echinacea and vaccinated at day 7. Echinacea, both alone and in combination with a polyvalent vaccine, significantly increased red blood cell count and hemoglobin concentration in dogs. This study also revealed a notable increase in lymphocyte count with echinacea compared to the polyvalent vaccine alone. Additionally, long-term use of echinacea resulted in elevated total plasma protein, lymphocyte, and neutrophil counts, without causing significant alterations in liver or kidney function markers.[30]

In a study of 28 dogs allocated to 4 groups—group I treated with silymarin alone, group II metronidazole, group III silymarin plus metronidazole, and group IV control. Ten days post treatment the efficacy of the combination—group III was 91% compared to metronidazole alone 75%. There were no side effects in the augmented group compared to the metronidazole group where 2 dogs had poor appetite and

intermittent vomiting, which resolved when metronidazole was discontinued. The body weight of those treated with metronidazole was significantly decreased in comparison with those treated with silymarin and metronidazole plus silymarin.[31]

In an RCT comparative study, valerian, ketamine, and diazepam were studied in cats. Valerian shortened the onset of effects of ketamine and reduced anxiety in cats.[32]

In a controlled observational study of 20 cats with lymphoma, 5 received no treatment, 5 received antineoplastic protocol, 5 were treated with ginkgo *(Ginkgo biloba)*, and 5 with combined antineoplastic protocol plus ginkgo. Ginkgo and chemotherapy provided 100% survival for more than 12 mo follow-up with reduced side effects from chemotherapy.[33]

THERAPEUTIC SUPPORT WITH BOTANICAL MEDICINE

Gastrointestinal Disorders

Gotu kola *(Centella asiatica)* was administered in 6 of 12 puppies with parvovirus in a RCT. Gotu kola increased the hemoglobin, packed cell volume (PCV) and platelet level, improved blood urea nitrogen (BUN), restored protein and albumin levels, and is recommended as an adjunctive therapy in parvovirus because it demonstrates protective immunomodulatory and antioxidative activity.[34]

In a study of 32 adult dogs, 24 with inflammatory bowel disease; grape seed extract *(Vitis vinifera)* reduced the WBC count in dogs with mild IBD, indicating a potential anti-inflammatory effect. There was also an increase in the abundance of bacteria with potential anti-inflammatory properties.[35]

Calendula *(Calendula officinalis)* has been used to treat acetic acid induced ulcerative colitis (as a model for the human disease) in German Shepherds. Ten dogs were randomly allocated to receive a placebo of saline or calendula via enema, and calendula was effective in resolving the ulceration.[36]

Liver Disorders

In an RCT of 50 geriatric dogs with hepatic dysfunction, all were treated conventionally with half the dogs given adjunctive ashwagandha *(Withania somnifera)*. Ashwagandha significantly improved serum alanine aminotransferase (ALT), aspartate aminotransferase (AST), albumin, cholesterol, and protein levels compared to control.[37]

In a controlled study, 28 dogs were treated with methylprednisolone to induce alterations in hepatic function. Fourteen of these were given a combination of milk thistle, turmeric, and artichoke *(Cynara scolymus)* for 30 d post-steroid injection. This combination of herbs significantly protected against elevations in ALT, gamma-glutamyl transferase (GGT), alkaline phosphatase (ALP), and corticosteroid-induced thermostable alkaline phosphatase in dogs' serum.[38]

In 15 client owned dogs with hepatopathy, Silybin from milk thistle improved liver function without any adverse effects.[39] In a clinical study on dogs and cats with cholangitis, cholangiohepatitis and liver failure, milk thistle, sea buckthorn *(Hippophae rhamnoides),* and curcumin were given in various combinations. All patients had improvement.[40]

Twenty cats, 10 with hepatic lipidosis and 10 with cholangitis were administered a supplement based on silibinin and phosphatidylcholine for 180 d. The supplement significantly reduced the activity of liver enzymes in serum (alanine aminotransferase, aspartate aminotransferase, alkaline phosphatase, and γ -glutamyl transferase) and the content of total bilirubin, albumin, pre- and post-bile acids in cats normalizing their liver function. Appetite was restored in all cats and the frequent episodes of diarrhea almost disappeared.[41]

In addition to conventional care, a combination of milk thistle and fermented methionine was administered to 10 of 20 cats with neutrophilic cholangitis. The biomarkers of hepatic injury in the supplement group were significantly reduced compared to controls with the combination suggested to protect from the typical effects of oxidative stress and damage following cholangitis.[42]

Behavioral Disorders

In a 4-w double blind RCT, 24 dogs experiencing stress and anxiety were given either a placebo or ashwagandha root extract once daily. Supplementation with ashwagandha resulted in significant improvements in stress-related symptoms measured by the urine cortisol-to-creatinine ratio, a statistically significant decrease in fear and anxiety behaviors, as well as a notable reduction in pain compared to the placebo group.[43]

Similarly, in a double-blind RCT, 16 healthy pet cats were exposed to stress, separation, noise, restraint, travel, and food stress; one stressor each week. Compared to control cats, cats treated with ashwagandha had improved liver function and decreased cortisol levels indicating strong antistress effects. There was also a significant decrease in cytokine levels indicating a strong anti-inflammatory effect.[44]

In an RCT, a combination of tryptophan, valerian, and passionflower *(Passiflora incarnata)* was given to 22 of 44 dogs with fear of fireworks. Each dog owner also received environmental and behavioral recommendations. Improvement in behavior and reduced salivary cortisol was significant in the supplemented group.[45]

An open clinical trial conducted across 10 veterinary practices evaluated the efficacy of ginkgo leaf extract in elderly dogs with age-related behavioral disturbances. The treatment was rated as good or very good in 79% of cases suggesting that ginkgo leaf extract is a safe and effective dietary supplement for managing age-related behavioral changes in senior dogs.[46] A study of ginkgo in 8 dogs with mild cognitive dysfunction showed a dose-related response with increased cerebral blood flow.[47]

Dermatologic Disorders

In a systematic review of medicinal plants as options for topical treatment in canine dermatopathies, 4 plants were identified as having a wide range of beneficial effects. They included calendula, St. John's wort *(Hypericum perforatum),* chamomile *(Matricaria chamomilla* synonym *Matricaria recutita*), and sage *(Salvia officinalis).* The review reported a sound evidence base on 133 publications for the 4 herbs. The authors concluded that since antibiotic-resistant bacteria have been found to be susceptible to extracts from these plants, they offer a potential new treatment option for dogs with infections caused by antimicrobial-resistant pathogens. Similarly, the antifungal properties of these 4 plants suggest they could serve as an additional option for managing dermatophytosis and skin or ear infections caused by *Malassezia pachydermatis* and dermatophytes. Calendula, St. John's Wort, and chamomile have demonstrated wound-healing properties, making them promising candidates to address the therapeutic gap in canine wound-care.[48]

Urinary Disorders

In a pilot study, 10 clients owned dogs with urinary tract infections were administered cranberry *(Vaccinium macrocarpon)* for 60 d. No control group was included; however, by day 15, 4 dogs showed a negative urine culture and by day 30 all dogs were negative and remained negative.[49] In another study, cranberry significantly reduced adhesion of uropathogenic *Escherichia coli* to urinary epithelial cells in female dogs.[50] In a study of 12 client owned dogs with recurrent urinary tract infection (UTI), 6 received

cranberry and 6 received antibiotics for 6 mo. None of the dogs developed a UTI.[51] In an RCT involving 94 dogs following decompressive surgery for intervertebral disc herniation, cranberry had no effect on bacteriuria in dogs; however, the dose administered was considerably lower than other studies.[52]

Renal Disorders

In an RCT of 34 client owned cats with stage II to III chronic renal disease cats received a control diet or one supplemented with a nutraceutical comprised of cranberry, dandelion *(Taraxacum officinale),* and bush clover *(Lespedeza* sp.) for 90 d. Herbs improved key indicators of renal failure, and no adverse events were reported.[53]

Musculoskeletal Disorders

In an open multicenter clinical trial, 29 dogs, 25 with confirmed osteoarthritis, were administered boswellia *(Boswellia serrata)* daily for 6 w. There was a reduction in severity compared to baseline and improvements were seen after 2 w in 71% of dogs.[54]

In an RCT of 32 dogs over 8 w, a combination of herbs including boswellia and turmeric improved clinical signs of osteoarthritis in treated dogs compared to control dogs.[55] A nutraceutical was compared to the same with added boswellia and a curcumin-based ingredient in an RCT of 20 client owned dogs with osteoarthritis. The study showed the herb supplemented group had reduced lameness and pain compared to a nutraceutic alone.[56] Several other proprietary products have been investigated that contain combinations of curcumin, boswellia, green tea *(Camellia sinensis),* and nutraceuticals.[57–59]

Gotu kola reduced pain and inflammation in a clinical study of 8 dogs with osteoarthritis.[60]

Endocrine Disorders

Thirty subclinical diabetic dogs (characterized by Impaired Fasting Glucose and/or Impaired Glucose Tolerance) were assigned to 5 groups of 6 animals each: Group I (positive control), Group II (haritaki *[Terminalia chebula]* extract), Group III (ashwagandha extract), Group IV (haritaki and ashwagandha extracts in a 1:1 ratio), and Group V (N-acetylcysteine). All treatment groups demonstrated significant reductions in random blood glucose, fasting blood glucose, glycated hemoglobin, serum fructosamine, and serum insulin levels compared to the positive control group following treatment. By day 30, a marked improvement in oxidative biomarkers was observed in all 4 treatment groups. These findings suggest that ashwagandha and/or haritaki effectively mitigate oxidative stress in subclinical diabetes mellitus, potentially preventing disease progression.[61]

Respiratory Disorders

In an open multi-centered veterinary trial, echinacea powder was administered to 41 dogs with food daily for 8 w. Treatment demonstrated significant immune-boosting effects. By week 4, 92% of dogs with chronic and seasonal upper respiratory tract infections—such as pharyngitis, tonsillitis, bronchitis, and kennel cough—showed marked improvement. The study concluded that Echinacea can be recommended for canine upper respiratory tract infections.[62] In a more recent RCT study of 14 dogs, Echinacea was given to 7 dogs; positive effects on the immune system were observed.[63]

In an early study, cats were administered marshmallow *(Althea officinalis)* or the polysaccharides from Althea in an induced cough model.[64] This and other studies support the use of marshmallow as an antitussive in cats.[65,66]

Future Perspectives

Integrating herbal medicine into veterinary practice reconnects us with our historic roots while ensuring the ongoing relevance of botanicals in advancing sustainable, evidence-based animal health care. This approach leverages research validating the mechanisms, efficacy, and safety of botanicals, highlighting their multi-targeted and rational application for supporting various small animal conditions. Veterinarians interested in botanical medicine can foster owner communication to ensure safer care, particularly for pets on prescribed medications. Practices that incorporate herbal options align with growing client preferences, bridging the gap between demands while promoting the safe, guided use of herbs. With several educational opportunities and growing interest by veterinarians, the role of herbs in small animal practice is set to expand, providing veterinarians and pet owners with additional options for optimizing animal health.

CLINICS CARE POINTS

- Dried Herb Equivalent (DHE) is the amount of dried plant material used to produce a given dose of an herbal preparation. For a liquid 1:2 extract means 1 part dried herb to make 2 parts liquid extract, so 5mL of a 1:2 extract =2.5g DHE. As a beginner aim for 10-25mg per 2lb DHE of a single herb in tablet or liquid form. Administer twice daily in wet food.
- A basic herbal dispensary could consist of : Chamomile, deglycyrrhizinated Licorice, Milk thistle, Echinacea, Ginkgo, Valerian, Gotu kola, Calendula, Ashwagandha, Cranberry, Marshmallow.
- A simple herb for chronic upper gastrointestinal signs such as GERD is chamomile traditionally known as the "Mother of the gut". 25 mg/2lb twice daily in food. Expect to see improvements in 3-5 days. More improvements can be expected with the addition of other herbs targeted to the pathophysiology.
- A simple formula to support dogs with infectious tracheobronchitis without antibiotics is equal parts echinacea and marshmallow in liquid extract. 25mg/2lb of each assuming the same concentration 1:2 then dose 1 mL of the combination 3-4 times a day for 2-3 days to alleviate and reduce duration of signs.
- Start herbal medicine such as Silymarin marianum in clinically well animals on NSAIDS or steroids and monitor for beneficial side effects. Apart from supporting the liver, observations might include improved digestion, behaviour and overall energy.
- Silymarin marinarum is considered a liver herb but it is a valuable herb to support renal disease and pancreatic disease. Use alongside conventional medicine in patients with these conditions as a basic but effective approach. More sophisticated prescribing relies on knowledge of the materia medica.
- Further training in veterinary botanical medicine can strengthen your clinical outcomes, therapeutic confidence, and case management skills. Purple moon and CIVTedu.org are good places to start.
- For peer support, consider joining the Veterinary Botanical Medicine Association vbma.org and the American College of Veterinary Botanical Medicine acvbm.org.

DISCLOSURES

Barbara Fougere formulates products for Broadreach Nature UK; and is a faculty member for the College of Integrative Veterinary Therapies. She is a part owner of Kelato Animal Health Australia.

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