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# JOURNAL

of veterinary botanical medicine

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*A publication of the Veterinary Botanical Medicine Association*



# Veterinary Botanical Medicine Association

## VBMA Purpose

The Veterinary Botanical Medicine Association is a group of veterinarians and herbalists dedicated to developing responsible herbal practice by encouraging research and education, strengthening industry relations, keeping herbal tradition alive as a valid information source, and increasing professional acceptance of herbal medicine for animals.

## VBMA Goals

- Represent member veterinarians and herbalists as political and professional issues arise.
- Establish standards of training and herbal training programs and to identify established programs with the goal of developing or reviewing certification standards and Degree Programs in Herbal Medicine.
- Support ethical scientific clinical research in herbal veterinary medicine and maintain avenues for exploration of traditional care in veterinary botanical medicine.
- Explore cultural traditions such as TCM, Greek/western herbalism and Ayurveda for their proper translation to and application in modern day animal conditions and communicate these.
- Compile databases of existing science, ethnoveterinary medicine advances, and eventually a library online.
- Liaise with manufacturers so that they have an expert body to advise them on the needs of veterinary herbalists and quality control concerns.
- Support sustainable environmental, agricultural and husbandry practices.

## VBMA Certification of Competency

The VBMA seeks to provide animal owners, farmers, and veterinarians with some standard of competency by which to choose a veterinary herbalist. Veterinarians certified by VBMA will earn the title "Certified Veterinary Herbalist". Non-veterinary herbalists "Certified Veterinary Herbalism Educator." Certification by the VBMA will require passing the exam with a grade of at least 70%, submission of 3 publication-quality case reports for peer review within 1 year of taking the test and donation of at least 10 test questions for future exams. Guides available online [HERE](#). Examination is administered yearly by VBMA at the AHVMA conference in the USA, where the VBMA holds their symposium. In 2016 the exam will be held in Columbus, OH.

## BOARD OF DIRECTORS

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## SUBMITTING CONTENT

### The VBMA invites contributions to the Journal of Veterinary Botanical Medicine.

The JVBM publishes material on all aspects of veterinary medical herbalism with emphasis on the clinical application of medicinal plants in veterinary medicine, the philosophy of veterinary herbal medicine, and the phytochemistry, pharmacology, herb drug interactions and research that applies to veterinary botanical medicine.

### Editorial Policy

Subject material must relate to veterinary botanical medicine. Accepted articles become the property of the Journal of Veterinary Botanical Medicine. Contributions are subject to peer review and editing. Contributions to the Journal of Veterinary Botanical Medicine must not be submitted elsewhere.

### Contribution Requirements

Contributions should be word processed and forwarded by email to the editor, with the file(s) saved in plain text or Microsoft Word formats. All statements must be referenced and a full reference list must be included. If the statement is the author's observation or opinion, this should be made clear. All statements should be of a professional nature and exclude any inappropriate style of writing. An abstract of the article should be included. A brief profile of the author should be included.

### Peer Review

All feature articles will be reviewed by two independent peer reviewers. Reviewed articles will be returned to the author for modification if required.

### Referencing

Textual citation methods should be employed. Requires the name of author and year of publication in brackets at the end of statements or paragraphs. The reference list should be arranged in alphabetical order. **JOURNALS:** Author's surname Author's initials. Year. Title of article. Journal name volume; issue: page numbers. **BOOKS:** Author's surname Author's initials. Year. Book title. Edition. City of publication: Publisher.

**Send all submissions via email to:**  
VBMA Communications Coordinator  
[communicationscoordinator@vbma.org](mailto:communicationscoordinator@vbma.org)

# A Letter From VBMA President Ihor Basko

## Acknowledgments

I would like to whole-heartedly thank all the teachers in this group and the VBMA organization that has provided the opportunities for us all to meet, learn, and interact. And, I would like to especially thank those keeping us all informed who keep the organization running behind the scenes for the past years, Jasmine Lyon, Elizabeth Lambert, and Amy Keane, the Board of Directors and our 2 past presidents Drs. Laurie Dohmen and Rob Silver.

## History

Before there was the VBMA, there were no real opportunities to learn veterinary herbal medicine. In the 1970s and 80s, many of us would take time off from practice to attend herbal conferences in areas in close proximity. I was lucky to live in California with educational opportunities available in the San Francisco and Los Angeles areas learning from human herbalists, botanists, and pharmacists who taught herbal pharmacognosy, i.e. the study of drugs derived from medicinal plants. In 1978, I introduced Chinese herbs in a class at Dr. Marvin Caine's barn to IVAS veterinarians on the benefits of using Yunnan Paiyao for bleeding and wounds, and Si Jun Zi Tang (Four Gentlemen Decoction) for use in GI disorders in pets. A few years later, IVAS created an herbal course, and besides myself, Drs. Rob Silver, Steve Marsden, John Limehouse and others began to teach herbal medicine to acupuncture veterinarians. (Today of course, we have the Qi Institute, and CIVT). At the time, there was still no place to study Western herbalism nor herbs from other countries and never from veterinarians without taking a lot of time off from practice and traveling, after which one would have to integrate this knowledge somehow into a veterinary practice. Dr. Susan Wynn came up with the idea of integrating all of the knowledgeable veterinarians in practice using herbal medicines (Western and Asian), and those wanting to learn into one organization for veterinarians...the Veterinary Botanical Medicine Association. This has become a great resource for learning.

## Opportunities

For veterinarians in the quest to study herbal medicines and their use, the VBMA offers many opportunities for study: Chinese herbal medicine and TCM, Western herbology, useful herbs from other nations, field trips with herb walks, a forum (the List) for expressing ideas, sharing information, and asking questions in a safe place and space. Perhaps, one should follow one's interest in a plant(s) in one's area, or a disease process that is frustrating... and begin your studies here. As I still love to hunt and study medicinal mushrooms, living in Hawaii has opened the door to many plants I would never have envisioned using, but I felt the 'urge' to begin my study of them: traditional uses, ethnobotanical history, the origins of the plants, how to processes them and what dosages to use. I have now more plants to use in my repertory to help ailing animals. There are many levels of understanding plants besides their uses and dosages: phyto-pharmacokinetics, phytopharmacology, biochemistry, plant energetics, their ecology, how and where they grow, harvesting and processing, hunting and sustainable wild crafting. The majority of veterinarians will want to use this knowledge in their practices, while some are interested in using their knowledge to work in the industry of plant based medicinal products, or teach at universities.

## Now

From attending herbal conferences, most recently the International Herbal Symposium, I see a growing movement of human healers (physical therapists, nurses, massage therapists, homeopaths, and chiropractors), pet owners, veterinarians, and the general public interested in the use of medicinal plants over the use of drugs and chemicals. More and more pet owners are seeking information and alternatives to conventional therapies. Unfortunately, as I see from Face Book conversations; many who do not have a knowledgeable veterinarian to discuss options will seek out information from Dr. Google. You can't blame them for doing so. This is one reason for the VBMA to increase membership and create a network of veterinarians across the country and perhaps other countries too. From the calls, I receive for a "consultation and second opinion" by pet owners across the US, there is a shortage of knowledgeable veterinarians in herbal medicine and no one to refer them to. With cancer rates increasing as well as the cost of diagnostic procedures, surgery and chemotherapy, pet owners are asking, "what else is possible?" There is a great demand from the public for herbal medicine and if we do not become the source, Dr. Google will.

## Future

When we first began the VBMA our goals were for smaller meetings in places where we could hunt medicinal plants, with access to the outdoors, healthier foods and peaceful environments from our standard conferences at a hotel. Al-

though convenient in many ways, having meetings with the growing AHVMA has instead led us to the opposite. Although I would like us to continue our valuable annual meetings with the AHVMA, I believe that smaller regional seminars perhaps allied with a smaller group such as the Academy of Veterinary Homeopathy given at a different time would serve the general members better, and provide opportunities to conventional veterinarians in the area to come attend. The concept and the phrases "eat local" and "eat and take for medicine what grows in your area (climate, geography, soil) for it will heal you" comes from Asia. Since the early 1960s the macrobiotic movement utilized this principle (Wa Sho Ku) in healing and eating. A good way to begin the study of herbs, is to know them in the area you live, first. That could be the Pacific Northwest, or the Mountain West, Southeast, etc. Each region of the country has plants that heal. So why not learn about them first? Learn their habitats and cycles of growth. Grow your own and have a deeper experience of the plant. Learn to process them into teas, tinctures, and powders. A regional meeting would include many States, and give veterinarians in those areas a unique opportunity to learn from veterinarians besides the local herbalists. It would provide a smaller yet more intimate experience from which friendships and collaboration could occur. Conventional veterinarians in the area would be invited to come and perhaps a few will be interested enough to come and not be intimidated by a large group of strangers, and a conference/hotel center. We have an opportunity to meet more veterinarians in a comfortable setting...Nature, from which new relationships begin to grow. My days at the IHS at Wheaton College demonstrated the importance of the "ambiance" for a better learning experience. The trees, plants, the peaceful feeling, the spaciousness within an old forest was very conducive to the study of plants out in nature, and making new friends and connections. I would like for us to continue our Eco-tours for those members who have more time to relax and explore in places that are enlivening and rejuvenating besides being interesting with the medicinal plants of the area. The frequency of these exhibitions will depend upon demand and assistance from you. For both projects, regional meetings and Eco-tour, the VBMA will rely on help from local veterinarians to make these projects happen. Please let me know if you would be interested in hosting either projects. Takes a team of 5 in my experience so the burden of organizing an event is not on one person. The easiest and most convenient way to study medicinal herbs for the pets we treat is through our Teleseminars which are offered several times a year. I would like to expand the frequency of these seminars, but a lot depends upon your interest and input. What speakers and what topics are you wanting to hear?

### **Closing Comments**

In a sea of skeptics and colleagues who believe we are doing "voodoo" medicine, we shall continue in our studies to include "evidence based medicine" not just to gain credibility, but to gain more insight into what is working and what is not, i.e. a reality check. We also will continue to explore and expand our studies of medicinal plants in a paradigm that is more esoteric, energetic, intuitive and connected to Nature, taught by teachers who are knowledgeable and experienced whether they are CE approved or not. Our expansion should not be limited to CE credits which are determined by those who are "limited" in their knowledge of medicinal plants. Only medicinal plants can provide nutritional benefits, control symptoms while improving organ functions by supplementing the deficiencies...with little or no side effects. Drugs and chemicals cannot repair, restore, and regenerate a physiological/biological being. This is what pet owners are looking for after conventional therapies have failed, or they have "seen the Light" in their own lives with medicinal plant use. These pet owners need guidance. We need more veterinarians with the knowledge and use of plants.

Please email me with your concerns, comments, issues, and questions: [drbfree@drbasko.com](mailto:drbfree@drbasko.com)

It's an honor to serve you!

Sincerely,

Ihor



**Ihor Basko, DVM, CVA  
Kauai, Hawaii**

[www.drbasko.com](http://www.drbasko.com)

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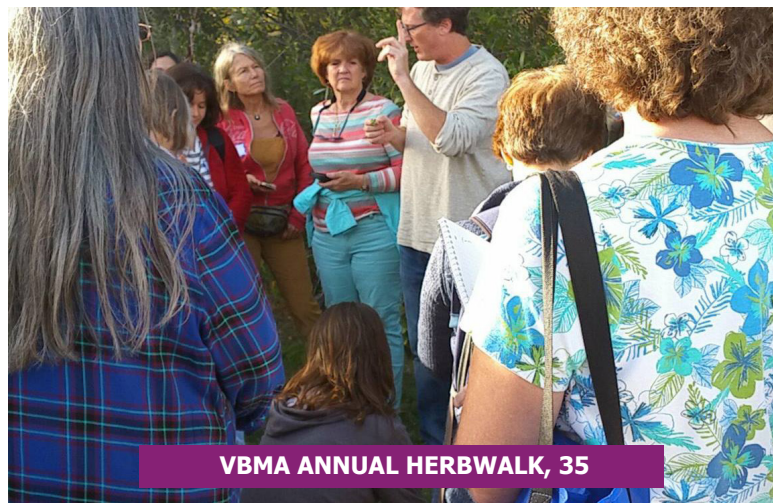


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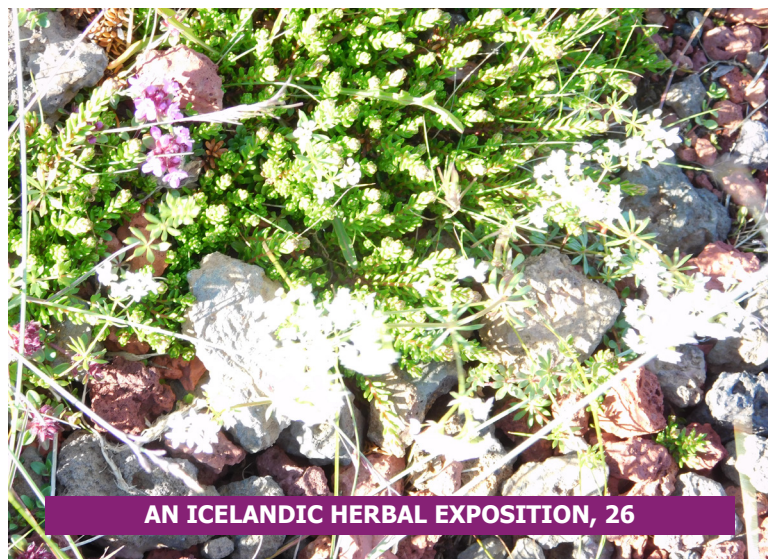


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## VBMA EDUCATIONAL SCHOLARSHIP

The Veterinary Botanical Medicine Association offers a yearly educational scholarship for veterinary students in the amount in order to promote herbal education.

What has turned you on to herbal medicine? How has herbal medicine influenced your course in veterinary school? Have you had a personal experience with herbs (either for yourself or your pet) that first peaked your interest in herbal medicine? Tell us a about yourself and you could win a \$500 scholarship to further your herbal education! Spread the word and tell your friends!

**Note:** There is no expiration date for monies awarded so you can use it on future continuing education needs!

Submissions should be emailed to [office@vbma.org](mailto:office@vbma.org).

**Deadline is 7/15/2018.**

## VBMA WELCOMES RONA SHEREBRIN

At our recent annual meeting, VBMA Member Dr. Rona Sherebrin became our latest President-Elect. Dr. Sherebrin received her Doctor of Veterinary Medicine degree with honours from the Ontario Veterinary College in 1991. After ten years in practice she became increasingly frustrated with the chronic nature of the diseases she saw in her patients, and the inability to do more for them than suppress symptoms. She began studying Traditional Chinese Veterinary Medicine (TCVM) to address the underlying disorders that produced the symptoms. We're thrilled to have her on our Board of Directors!



## Medical Marijuana & Your Pet The Definitive Guide

### Veterinarians Rave About This Book!!!



Dr. Robert J Silver, a nationally-renowned holistic veterinarian, has written this important book on medical marijuana for pets.

*Susan Wynn, DVM, CVA, CVHC, AHG*  
([www.susanwynn.com](http://www.susanwynn.com)):

"I rarely have the opportunity to read a groundbreaking book, and it gives me great pleasure to write this endorsement for Dr. Silver's book, Medical Marijuana and Your Pet. Both pet owners and veterinarians will find this book invaluable."

*Cheryl Schwartz DVM (author of Four Paws Five Directions):*

"Dr. Silver has written an amazing, pioneering book, Medical Marijuana & Your Pet. He brings experience, expertise, scientific data and guidelines for use in an enjoyable, well-documented book that will help an enormous number of animals and their humans.

Thank you, Rob, for your courage!!"

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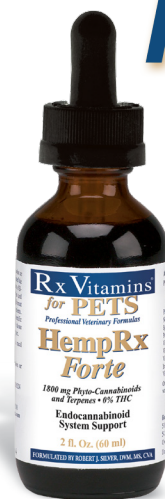
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## Crock Pot Recipes for Pets

by Dr Ihor Basko, DVM, CVA

### Crock-Pot Beef & Barley

#### Ingredients

- 6 cups beef stew meat (grass fed)
- 2 cups pearl barley (organic)
- 2 cups broccoli
- 1 cup carrots
- 1/2 tsp sea salt
- 2 tsp ginger root (fresh), 1/2 if dry
- 6 cups, water or bone soup

#### Directions

Chop the meat and vegetables into small, bite sized pieces, depending upon your dog's jaw size. Put everything into the crock pot and cook until done, approximately 2 - 4 hours. Feed 1/2 cup per 6 - 10 pounds of body weight.



### Boiled Beef and Vegetables

#### Ingredients

- 6 cups 1/2 inch beef chunks
- 2 cups carrots (well chopped)
- 2 cups white potato or parsnip
- 2 cups kale, cabbage or broccoli
- 6 cups water or organic beef stock
- 1 tsp ginger powder
- 1 tsp sea salt
- 1 tbsp fresh parsley
- 1 tbsp olive oil



# NYCAVMA: DAVID WINSTON ETHNO-BOTANY



**Join the NYCAVMA & David Winston for an Ethno-botanical Adventure at Menla Mountain!**



May 3rd - 6th 2018 the NYCAVMA proudly is hosting world renowned herbalist, David Winston, for a four day botanical delight. Herb Walks on this amazing mountain will be interspersed with Lectures on Herbal pain relief, Lyme disease, Adaptogens, Autoimmune disease and Allergies with a Summary and comparison of Organ System Remedies.

David will be lecturing from the afternoon on May 3rd to 1 PM on May 6th. Starting in the morning of May 3rd, Cindy Lankenau, DVM will cover basic energetics of western herbs for those who need a refresher on Western Botanical Medicine and on how to translate human herbal material into veterinary use.

**Registration is now open at [www.nycavma.org](http://www.nycavma.org) - discounted price for VBMA Members!**

Checks for the seminar should be made payable to Cynthia Lankenau and mailed to:  
NYCAVMA c/o Cindy Lankenau 9002 Sunset Drive, Colden, NY 14033.  
Once payment is received you will be sent a link for housing at Menla Mountain.

# 2018 HEALER, HEAL THYSELF RETREAT



## Sponsored by the Council of Elders (AHVMA)

Announcing **Stones for Spiritual Growth - A Healer, Heal Thyself** retreat. Come and join other AHVMA members for Rock Hounding and Stone energetics, with great camaraderie, hikes, and an all around nature filled event at the Mountain Retreat and Learning Center, Highlands NC, April 23rd - April 26th, 2018. **Register at [www.ahvma.org](http://www.ahvma.org).**



# REVIEW: INTERNATIONAL HERB SYMPOSIUM

## Herbal Medicine Education of Veterinarians at a Venue with Proximity to Nature

by Ihor Basko, DVM, CVA



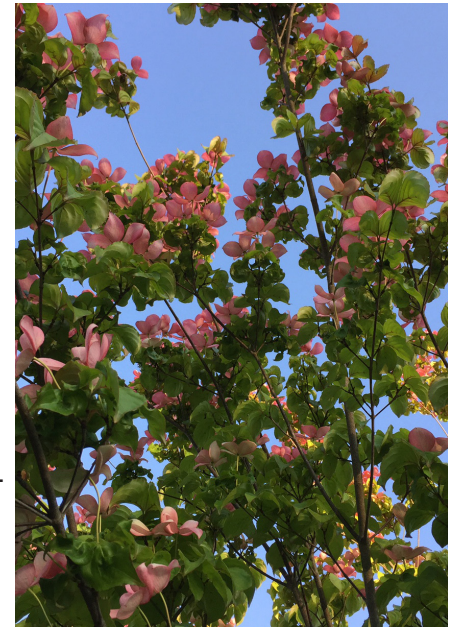
*"How important is a constant intercourse with nature and the contemplation of natural phenomena to the preservation of moral and intellectual health! The discipline of the schools or of business can never impart such serenity to the mind."*

*- Henry David Thoreau*

After hours on the plane and "the red eye" to Los Angeles and then another 5 hours to Boston, I took a 2hour shuttle to the college. Getting dropped off with my luggage, backpack and laptop by my cab driver brought back memories of my first trip away from home to attend college. Old brick buildings from the 1800s, bushes of medicinal plants, huge grass lawns, a pond with a fountain, ducks, and giant trees everywhere on this 113-acre main campus. While waiting for orientation and check in, I sat under a tree, took some deep breaths and began to feel "at home".

Trees have long been important to Wheaton. Mrs. Wheaton, who was herself interested in trees and collected specimens to plant in her own gardens, deeded more than 40 acres of woodland at the southern edge of the campus to the Seminary in 1894. Mrs. Wheaton planted many trees and her forest became known as the Seminary Woods and later as College Pines with over 1300 trees and 100 species. Originally, established as a women's college (1834) in 1988 Wheaton College began to admit men. Graduating classes have been donating trees and other plantings to the College since at least 1903. Beginning in 1922, Dr. Mable Rice, head of Wheaton's botany department, developed botanical gardens and records of the specimen trees on the campus and in the woods.

Walking around the campus cleansed me of all my travel stress as I passed under trees and was embraced by old familiar smells of plants and flowers of my youth. It put me in the right mood for receiving, feeling, absorbing knowledge and the experiences of the teachers sharing their presentations with us all present. David Winston, Christopher Hobbs, Guido Muse, Rosemary Gladstarr...and more! Although I knew mostly no one there, the feeling was comfortable and with an "Aloha Spirit" towards each other and reverence for plants and trees. My people!



Walking to classes in different buildings and rooms was a pleasure. The Space of the Place was peaceful, flowing with hills, paths and people within the nourishing arms of the Earth Mother. I became aware of what is missing in our herbal medicine education of veterinarians: A venue with proximity to Nature.....difficult to achieve in a conference center or hotel environment.

The student participants included human naturopathic doctors, chiropractors, acupuncturists, holistic veterinarians, medicinal plant people, shamans and healers of all ages with the majority being very young adults that would be the age of my granddaughters.

Where Are the Men? For the last 10 years, every time I attend or speak at a conscious spiritual, holistic, natural medicine, or community event, I see mostly women...perhaps 10 percent or less are men. A Few Good Men. It was no different at the International Herbal Symposium. I asked veterinarian Dr. Stephen Tobin...one of our great homeopaths, "What are you doing at an herbal conference?" He replied in so many words that seeing the plants in Nature (herb walks), and learning more about their properties and energetics makes him a better homeopath.



My experience at the International Herbal Symposium gave me Hope for the Planet. Women seem to be leading the march to a more sustainable and healthy Planet, as well as in their local communities. Women connected to the Earth and plants are giving birth to new ideas on how to help "save Earth"...as well as a few good men. A man attending the conference was inspired to study herbal medicine so that he could help cure his dog's partial paralysis...a rescued young pit bull.

Sitting under a tree or on a bench talking to people, I was impressed with the herbal community that produced the event United Plant Savers and Wheaton College...their efforts and their ideas. The support Staff was fabulous and took very well care of the speakers needs and foibles. The program was excellent and the teachers top of the spectrum of knowledge and experience. They were at ease to express themselves fully with their enthusiasm, incites, and miracles, as well as failures with an audience of verdant admirers who can relate. Close bonds and connections occurred with the participants sitting in chairs, and the teacher presenting a lecture on medicinal plants. "Everyone was on the same page." Lots of questions, too.



I got the value of the importance of continuing the practices at home of growing my own herbs, observing them in Nature, harvesting them sustainably, processing them properly into tinctures, powders and teas. Knowing is growing. Knowing plants physically (see, touch, feel, smell, hear) and their pharmacology and kinetics are 2 important levels of understanding. But. Experiencing them emotionally using different senses, discovering where they grow in their Natural environment supported by an ecology that is different with each plant, and includes the local soil, moisture content, humidity, microorganisms, mycelia, plants, parasites, and trees.

I took many such walks during my 3 days at the college, being unfamiliar with the local plants, I found them very attractive to investigate. Without knowing what they were, I had those plants that kept drawing me to them. Breaking away and then teaching a class or attending one gave me great peace within. It also reinforced my practice and its importance of "hanging out with plants in the wild". One can't "hang out" with a tincture of goldenseal, except by cultivating and growing, and/or studying them in forests, fields, jungles, and desert. We can only administer the herbs (orally or topically and/or inhaled) to ourselves to "feel" it. Seeing Goldenseal is so much more satisfying than its tincture.

There are some of us old hippies left, and when merging with the new energy from the young people (world-wide) who are grounded and connected to Nature-Nurture, Love and Co-creation.... we have a chance at "Making the Earth Great Again".



*"I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived."*

*- Henry David Thoreau, Walden*



# A DAY IN THE LIFE

## Featuring Alexia Tsakiris

BVetMed, CVA, GDipVWHM



Thanks to day light savings time, I am up early this morning. With Lulu, my 1.5yo cattle dog mix trying to pull my socks off my feet, I make my way into my living room. After making coffee, my 9 year old son on the couch asks for a "farm fresh egg" (aka an egg from our backyard flock) on avocado toast. So I start making eggs and warming up Lulu's homemade food, while eating some granola. I drop the boys off at school and in 10 minutes am at my office. I am trying to develop a meditation habit and get 5 minutes in. I have enough time before appointments to chat with my practice manager about planning her wedding, open the mail, write a check and answer an email from my acupuncturist about her itchy dog. The day was starting out well - one of my favorite clients brought me coffee when she came to pick up herbs for her dog.

I opened my holistic practice two years ago, with a childhood friend. It was time after being in conventional practice and integrating in holistic modalities for the past 10 years. Owning my own practice is a lot more work than working for someone else, but I am blessed to truly love going to work everyday. My kids and husband have been super supportive about my full time schedule. I also quite enjoy not having to practice conventional medicine, and often find patients come in for a 2nd or 3rd opinion. The office is located in an old spa, which is a great set up for us. The speakers in every treatment room is a total bonus for playing soothing spa music for my clients and their pets. I see appointments every half hour, and hourly for initial consults.

My first patient came in for a lump under the eye, which appeared to me to be a scab and irritation from a tick bite. I made an essential oil blend in calendula oil to apply twice daily for antimicrobial action and advised she mix some stasis breaker with coconut oil and apply once daily in case it is a ruptured cyst. Her owner asked me for references for local acupuncturists. I really feel that the whole family needs to be healthy and am often handing out cards of local acupuncturists, chiropractors etc.

Next was my favorite priest and his two senior dachshunds. We discussed diet (he is currently making homemade with kibble), did physical exams, went over his concerns with Pebbles' chronic and worsening incontinence. I send home a tiny trial of Bu Zhong Yi Qi Tang powder. I like to make sure my patients are taking the herbs before I dispense a large amount. I was going to try Jin Gui, but went with what her pulses told me - her Spleen pulse was deficient and she has had muscle atrophy. I also asked him to drop off a urine sample to be sure.

My last patient of the morning belongs to a human acupuncturist. I love when they come in because we talk herbs and essential oils the entire time! Whisper is recovering wonderfully from an episode of old dog vestibular she developed

3 weeks ago. You would never know she had been affected. She initially came in a year ago for lameness. Her owner mentions abdominal pain and as we had discussed her tender belly a few weeks ago, we add in Ge Xia Zhu Yu Tang into her herbal plan. She is on a half dose of Minor Bupleurum and 1/2 dose of Bone Stasis.

During my lunch break my practice manager is sure I get food into my system as I do payroll and pay bills. I also speak with a vet student who wants to do an externship with us. I love having students around! It keeps me on my toes.

After lunch I see Ziggy, a 9 year old pug, who has a multitude of problems which include diabetes and interdigital cysts. His owner is concerned about his pu/pd and again we discuss his diet. I once again go over the benefit of having a high protein almost no carb diet. His owner is training to become a personal trainer and I give him homework to find out what humans are told to eat when they are diabetic, and it typically isn't loaves of bread. As I am needling Ziggy, his owner asks me what the purpose of the acupuncture is. Situations like these can frustrate me, but I try to use them as a learning experience for me and my clients. Ziggy is moving around much better since coming for acupuncture and his interdigital cysts are almost gone.

Simba, a 9 year old Maltese, is a new allergy case who I am seeing for the second time. He has a slew of environmental and food allergies to the point that her owner was over and underwhelmed with the lack and expense of her food options. As he is allergic to dust and grain mites (and for many other reasons), dry kibble was out of the question. I had made him a tincture on the first visit which included Baical Skullcap, astragalus, echinacea, milk thistle and unprocessed rehmannia. He was less itchy, but still going after himself for minutes at a time. Not shockingly, we found fleas. After some acupuncture and a blood draw for a routine cbc, chem, t4, he was sent home with a sample recipe for a homemade meal and an essential oil based flea repellent.



Then one of my favorite young patients came in, Raven, a young mixed breed from the south, who is recovering from a case of severe dysbiosis, H. pylori, IBS and low albumin. She has gained 7 pounds in the last month and no longer is emaciated! She is so happy to be getting acupuncture today. She is taking her two tinctures well. I am using a demulcent and mucus membrane healing combo (including licorice, marshmallow, burdock and eleuthero) in the evening and more astringing and antimicrobial (goldenseal, sarsaparilla and turmeric) in the morning. I love helping these GI cases!

My last appointment of the day was Jordin, an 8 year old schnauzer, who I have been seeing for the last 4 years. I initially saw her for grade 2 MCTs. She has been doing great, even with a recent diagnosis of mild mitral valve disease. I decided to change up her tincture going into winter and since she is doing more agility. I treated her with acupuncture and spinal manipulation.

Since I am trying to create more time for taking care of myself, today I finish early at 4pm and meet my husband and kids at the chiropractor. We go home and discuss how school was (aka how many catches the boys had during a game of kickball at recess) and how many eggs our chickens laid and Lulu once again is trying to steal my socks off of my feet. I help my husband get an early dinner ready as the boys play soccer outside in this crazy warm November we are having here in NJ. After a quickly eating, I leave for a talk being given by an MD and local herbalist, titled "Communication with the Plant World" at a local university. It turns out that my 4th cousin is one of the lecturers. Our Greek ancestral memory runs strong when it comes to herbs. It was a fascinating lecture about the Music of the Plants.

When I get home, I kiss my sleeping boys and set up the diffuser with some essential oils to help them clear their lungs and protect them from the viruses going around school. My husband and I relax for a little on the couch before heading to bed. I finish my night reading and replying to emails, and then get cozy with Peter Holme's Book on Integrating Western Herbal Medicine.

# CASE REPORT: CANINE

## Treatment of Left Intra-atrial Mass with Traditional Chinese Herbal Medicine in a Boston Terrier

by Sayaka Takeuchi BVSc, CVA, CVH

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**Abstract:** In Traditional Chinese Medicine (TCM), the most common patterns of cancer are Qi Deficiency, Phlegm and Blood stasis.[1] The treatment goal is to stimulate Qi, nourish Blood, and break up Blood stasis. In this case, Qi and Blood tonics, Ba Zhen Tang (Eight Treasures) and Heart Qi Tonic were prescribed initially, and Xue Fu Zhu Yu Tang was added. Xue Fu Zhu Yu Tang is known to move Blood and resolve stagnation but it is also a transporter herb to the chest.[2] These herbal formulas were effective in slowing down the growth of the intra-cardiac tumor after three months. Phellinus Linteus (PL) was then added to the treatment for its hormonal and cell-mediated immune stimulation and anti-tumor activities. The trans-thoracic echocardiography review after the fifth month revealed tumor shrinkage, this was two months after the introduction of PL. The use of Chinese herbal therapy provided alternative treatment of left atrial mass when conventional therapy was not indicated.

### Introduction

Cardiac tumors in animals are rare with prevalence of 0.12% to 0.19%.[3] In dogs, primary canine cardiac tumors occur in large breeds, middle-aged animals, and more frequently observed in neutered animals. Cardiac tumors occur as primary or metastatic mass.[4] Atrial tumors are rare in dogs and in humans, tumors located within atrium are almost always myxomas or myxosarcomas.[3] Other intracavitary tumors include ectopic thyroid carcinoma, chondrosarcoma, fibrosarcoma, rhabdomyosarcoma and chemodectoma.[3] The clinical signs vary depending on the location of the mass and their hemodynamic disturbances.[4] Obtaining definitive diagnosis is often difficult as biopsy procedure is associated with risks of arrhythmia and hemorrhage. This lack of definitive diagnosis preclude patients from receiving the appropriate treatment. Traditional Chinese Medicine (TCM) has been used for the diagnosis and treatment of tumors for 3,000 years.[2] In this patient, the eight principles were used to diagnose the underlying constitutional cause of the tumor and the treatment principles were to tonify Qi and Blood, to invigorate Blood Stasis, and to clear Heat.

### Case

A 9-year 10-month old, male neutered Boston terrier was presented to JASMINE Japan Animal Specialty Medical Institute for left atrial mass. The intra-cardiac mass was diagnosed when murmur (Grade 3/6) was auscultated by a primary veterinarian during a preanesthetic examination for right perineal hernia surgery ten months ago. Trans-thoracic echocardiography revealed an intra-cardiac mass of the left atrium (72.15mm, 39.0cm<sup>2</sup>). The mass was located at the cranial wall of the left atrium partially blocking the left pulmonary venous return, resulting in tricuspid regurgitation (TR: 3.87m/s) with moderate pulmonary hypertension (Pressure Gradient: 59.89mmHg) (Fig 1). CT scan revealed no signs of metastasis but there was an involvement of the base of aorta, extending towards the mediastinum (Fig 2). The origin of the tumor is unclear and the intra-cardiac mass was thought to be a benign, locally invasive cardiac tumor. The left atrial mass had continued to grow slowly but steadily over ten months. (Table 1) These tumors respond poorly to surgery and chemotherapy, thus Chinese herbal medicine was selected as a sole treatment of the intra-cardiac mass.

The patient had exercise intolerance, he would sit down and rest before continuing his walks. Appetite was normal, urine color was yellow, and defecation was sometimes difficult as he had perineal hernia. Sunbathing for three hours a day has been his routine activity for many years since he was a young dog and his energy level was better in the afternoon. The owner was feeding him cooked diet with white rice, chicken, green leafy vegetables, potato or sweet potato, cream cheese and milk. Lactulose syrup was prescribed for his perineal hernia. On physical examination, the patient was friendly and Shen was normal with body condition score was 6/9. His nose was dry, cracked, and crusty, and his face was partially covered with grey hair. There was big, flaky dandruff on his body and hair was dry and brittle.

tle. The extremities were normal to warm on touch. His tongue was pale with white coating and the pulse was weaker on the right than the left. Back Shu points were sensitive from BL 15 to 24, most sensitive at BL 20, 21 and 23.

TCM diagnosis was Heart Qi Deficiency with Blood Stasis in the Upper Burner (Shang Jiao) based on the mass in the left atrium. The patient also had underlying Blood Deficiency and Spleen Qi Deficiency. The treatment aim was to Tonify Qi and Blood, resolve Blood Stasis, and treat underlying conditions. Ba Zhen Tang (JT:Eight Treasures) 1 gram orally twice daily, Yang Xin Tang (JT:Heart Qi Tonic) 0.25 gram orally twice daily, and Xue Fu Zhu Yu Tang initial dose 0.25 gram orally twice daily then maintenance dose of 0.5 gram orally twice daily were prescribed. Xue Fu Zhu Yu Tang (JT) was prescribed for its Blood invigorating properties and resolving Blood stasis above the diaphragm to shrink the tumor mass. As a transporter for Ba Zhen Tang (Eight Treasures) and Xue Fu Zhu Yu Tang, Yang Xin Tang (Heart Qi Tonic) was chosen to help deliver the herbs above the diaphragm. Home cooked food was recommended and Phlegm causing food such as milk and cheese to be avoided to the owner.

Eight weeks after the treatment of Chinese herbal medicine, the left atrial mass was steadily growing and the measurement of the mass was 119.22mm. Exercise intolerance was resolving and the sunbathing frequency has reduced, and this was the first time he did not check the sun first thing in the morning for years. According to the owner, he was panting more and his urine color was darker. On examination, the patient's tongue was pink with red tip and his pulse was weaker on the right. His dandruff became smaller flakes and his hair coat has improved. Qi and Blood Deficiency signs were resolving and Yin deficiency has become more prominent. Previous treatment was continued and Zhi Bai Di Huang (JT:Anemarrhena, Phellodendron, and Rehmannia) 0.5g orally once at night, was added to the prescription. Zhi Bai Di Huang (Anemarrhena, Phellodendron, and Rehmannia) contains Zhi Mu and Huang Bai synergistically tonify Yin and clear False Heat due to Yin deficiency.[5]

Twelve weeks after the initiation of Chinese herbal medicine, his energy level has improved and the owners noticed him to be playing more. Since the last adjustment of herbal medicine, he has started to enjoy his routine sunbathing. His water intake has increased and his urine color was not as dark as before. Tongue was pink and his pulse was weaker on the left, especially deficient in Liver and Heart. Yin deficiency signs has resolved since adding Zhi Bai Di Huang (Anemarrhena, Phellodendron, and Rehmannia), dandruff was further reduced and his fur was soft and glossy. Additional to the current herbal medicine, Phellinus Linteus (AG:Sang Hwang 125 0.5 gram orally twice daily and LD 0.5g orally twice daily) was added to the treatment regimen.

Sixteen weeks after the Chinese herbal therapy, the patient came back for a review. On echocardiographic examination, the left atrial mass was 123.33mm (11.20cm<sup>2</sup>) (Table 2). The tumor growth rate has decreased and the center of the tumor appeared more radiolucent. He was maintained on Ba Zhen Tang (Eight Treasures), Xue Fu Zhu Yu Tang, Sang Hwang LD and 125. Yang Xin Tang (Heart Qi Tonic) and Zhi Bai Di Huang (Anemarrhena, Phellodendron, and Rehmannia) were discontinued and Liu Wei Di Huang (JT:Rehmannia 6) 0.5 gram orally once at night was added. Liu Wei Di Huang (Rehmannia 6) is a basic herbal formula for Kidney Yin deficiency and its combination of all ingredients results in "three tonic effects and three sedative effects" ensure the tonification of Kidney and Liver Yin without any stagnation.[5]

Twenty four weeks after the initiation of Chinese herbal medicine, and twelve weeks after the addition of Phellinus Linteus, the tumor size has reduced to 105.20mm (7.98cm<sup>2</sup>) on echocardiography. The patient was doing well, had a good appetite, good Shen and he showed no temperature preference. His tongue was pink with white coating and the pulse was bounding on the right femoral artery. He was sensitive on BL17 to BL 24, most sensitive at BL21, 22 and 23. The hair coat continued to improve with minor dandruff and paws were normal on touch. The nostrils were still dry and crusty. He was continued on Ba Zhen Tang (Eight Treasures), Xue Fu Zhu Yu Tang, Phellinus Linteus, and Liu Wei Di Huang (Rehmannia 6).

## Discussion

According to conventional medicine, tumors develop as a manifestation of damage or mutation in DNA that result from genetic predisposition, exposure to radiation, toxic chemicals or drugs, chronic infection or inflammation and weak immune system. In TCM, cancer is viewed as a sign of systemic toxicity. It is stated as "tumors were caused by pathological factors which had stayed in the body over a long time".[1] Classical writings explain the etiology of tumors as internal injuries, emotional trauma, invasion of external pathogenic factors such as heat, cold, damp or wind, or the

accumulation of toxins, poor diet and inability to eliminate metabolic waste.[2] These factors induce cancer when the animal's defense system fails, and therefore cancer is the manifestation of body's inability to remove pathogenic factors, rather than a localised disease. Tumors are considered to develop from a Deficiency in Qi. Qi Deficiency eventually leads to Deficiency and stagnation of Qi and Blood and the development of Damp, Phlegm and Toxic Heat.[6] Accumulation of Qi, Blood, Phlegm and Toxic Heat can then form a mass. The three most common TCVM patterns of cancer are Qi Deficiency, Phlegm and Blood stasis.

Qi Deficiency is the fundamental underlying TCM pattern of all cancer patients. Qi Deficiency decreases the immune function with reduced mutation regulation of CD4 and CD8T cells and macrophages.[1] Qi Deficiency fails to move and generate Blood and result in Blood Deficiency and stagnation. Blood stasis in combination with Qi Deficiency is the key factor leading to tumor growth and metastasis.[1] Ba Zhen San (Eight Treasures) is a combination of Si Jun Zi Tang (Four Gentlemen) and Si Wu Tang (Four Substances), thus it treats underlying Qi Deficiency and Blood Deficiency without emphasizing over the other. A study has shown that Si Jun Zi Tang (Four Gentlemen) improved T lymphocyte and NK cell activity and also increased neutrophil cytophagic index in patients with Spleen Qi Deficiency.[5] Si Wu Tang (Four Substances) contains Shu Di Huang (Rehmannia) and Bai Shao (Paeonia) to nourish Blood while Dang Gui (Angelica) and Chuang Xiong (Ligusticum) to activate Blood. A study showed Blood promoting and Stagnation resolving properties of Si Wu Tang (Four Substances) by decreasing lipemia and blood viscosity.[5] Another study demonstrated significant stimulation of humoral and cell mediated immunity in mice following administration of Si Wu Tang (Four Substances).[5]

Mitral valve regurgitation and tricuspid regurgitation were observed in this patient most likely due to the left atrial mass obstructing the normal blood flow. To help support the heart function, Yang Xin Tang (Heart Qi Tonic) was added to tonify Heart Qi, invigorate Blood and calm the Shen. It contains king herbs Huangqi (Astragalus) and Dang Shen (Codonopsis) to tonify Qi. Bai Zi Ren (Biota), Yuan Zhi (Polygala), and Wu Wei Zi (Schisandra) all tonify the Heart Qi. Blood tonics such as Chuan Xiong (Ligusticum) and Dang Gui (Angelica) are added to this formula to prevent Blood stagnation due to Qi Deficiency.

Xue Fu Zhu Yu Tang is known as one of the main herbal formula to move Blood and resolve stagnation. The main principles of this formula are to eliminate Blood stasis by activating Blood circulation, and activate Qi circulation and soothe the Liver. Tao Ren (Persica) and Hong Hua (Carthamus) invigorate the Blood and dispel Blood stasis. Niu Xi (Radix Cyathulae) unblocks stagnation in the blood vessels and guides blood downward. Sheng Di Huang (Rehmannia), Dang Gui (Angelica), Chuan Xiong (Ligusticum), and Bai Shao (Paeonia) nourish the Blood, activate Blood circulation, and help to cool Blood that has been heated by chronic stasis. Dang Gui (Angelica) helps to regenerate new Blood and it also has anti-tumor, immune-stimulating, and anti-angiogenic properties that reduce vascular permeability in vitro.[2] Inhibition of angiogenesis is a crucial anti-tumor pharmacological effect in preventing tumor growth and metastasis. Xue Fu Zhu Yu Tang reduces blood viscosity by its anti-platelet properties thereby preventing metastasis, as studies indicate that blood viscosity is closely associated with tumor metastasis and adhesion of tumor cells.[7] Chai Hu (Bupleurum) soothes Liver Qi to relieve chest pain, and Jie Geng (Radix Platycodonis) guides all of the herbs upward to the chest. Therefore, this formula is a useful transporter herb to the chest when used in combination with other herbal formulas to break up the mass.[8]

Yin Deficiency is often associated with cancer patients as tumor mass is regarded as a toxic condition where it accumulates heat, which further contribute to stagnation.[6] In this patient, after addressing the Qi and Blood deficiencies, Yin Deficiency with empty Heat sign was observed. To help eliminate empty heat, Yin tonic, Zhi Bai Di Huang (Anemarrhena, Phellodendron, and Rehmannia) was prescribed, then once empty Heat sign has diminished, Liu Wei Di Huang (Rehmannia 6) was prescribed as a maintenance herb to nourish Yin. Yin tonics can be used in combination to other herbs to regulate the growth of a tumor cell and to maintain homeostasis of the body. Liu Wei Di Huang (Rehmannia 6) can enhance proliferation of spleen T-lymphocytes and secretion of interleukin-2 to cause an immune-mediated tumor effect.[7]

Phellinus Linteus (PL)(Sang Hwang 125 and LD) is a species of mushrooms belonging to the Hymenochaetaceae Basidiomycetes, which is indigenous mainly to tropic America, Africa and East Asia.[8] Medicinal use of PL has been documented for more than two centuries in the Shennong's compendium of material and The Characters of Drugs written by Quan Zhen during the Tang Dynasty.[9] Despite the ancient use of PL, its anti-tumor activity of PL has only been

confirmed in both vivo and vitro recently by modern research. The anti-tumor activity of PL is associated with isolated cell wall derived (1-3;1-6)- $\beta$ -D-polysaccharide.[9][10] Research has revealed polysaccharides have immunomodulator or immunoregulator effect through activation of regulatory T cells, B cells, dendritic cells (DC), and macrophages by inhibiting IFN- $\gamma$ , IL-2 and TNF- $\alpha$  by Th1 cells and activation of IL-1 expression in Th2 cells.[11][12] The proteoglycans stimulates B cells and increases CD80 and CD86 expression by regulating protein tyrosine kinase and protein kinase C signaling pathways. Furthermore, research indicates PL also has a function to control growth and metastasis of tumors through apoptosis, anti-adhesion and antiangiogenesis.[12] Silvia D et al's study found that PL induced cell cycle arrest at S phase and also demonstrated cystostatic effect.[13] It also demonstrated free radical scavenging activity and inhibition of lipid peroxidation by using the 70% ethanol extracts.

### Conclusion

The TCVM approach for treating mass is to give the patient good quality of life while either slowing the growth or shrinking the mass. Most tumor cells are destroyed by host Natural Killer (NK) cells, macrophages and neutrophils. Herbal medicine stimulates immune function and improves the activity of the NK cells, macrophages and neutrophils which remove tumor cells.[7] Ba Zhen Tang was selected to treat the underlying Qi and Blood deficiencies and also address the immune Deficiency. PL and Xue Fu Zhu Yu Tang were selected to help soften and break stasis, inhibit cell mutation and tumor growth. Chinese medicine treats the root cause of illness and every animal as a distinct individual.

### Footnote

JT: Dr Xie's Jing Tang Herbal, Inc., Reddick, FL

AG: Amazing Grace, Thailand

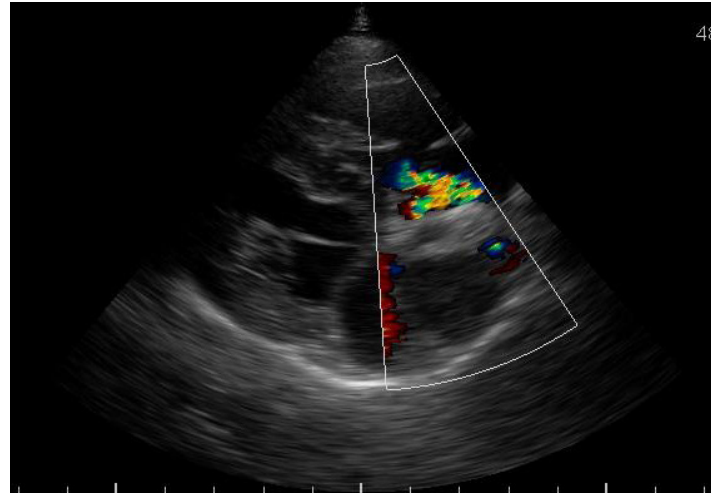
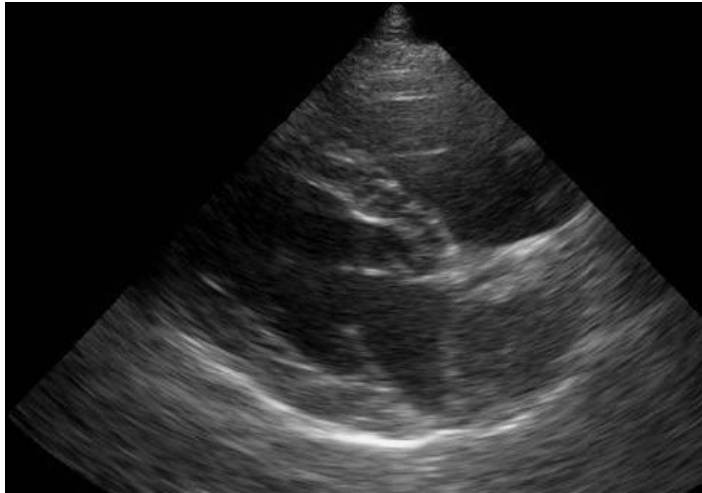


Fig 1. Two-dimensional echocardiogram.

A. (Left) Right parasternal long-axis four chamber view showing a left atrial mass.

B. (Right) Right parasternal long-axis four chamber view with color-Doppler showing tricuspid regurgitation.

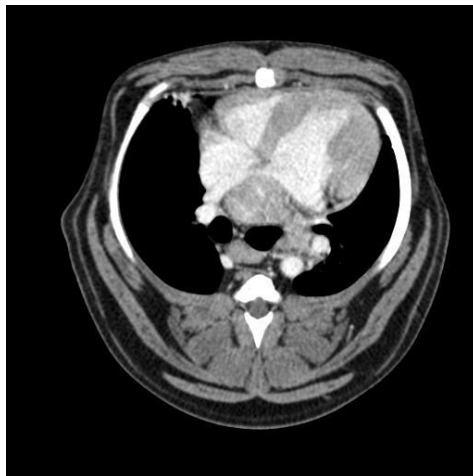


Fig 2. Cardiac CT scan image demonstrating a non-homogenous mass within the left atrium.

**Table 1:** Echocardiographic measurements of the left atrial mass

Time	Size (mm)	Area (cm <sup>2</sup> )
Initial Consultation	72.15	3.90
6-month review	81.33	5.09
8-month review	92.84	6.08
10-month review	109.11	9.35

**Table 2:** Echocardiographic measurements of the left atrial mass after initiation of TCVM

Time	Size (mm)	Area (cm <sup>2</sup> )
8 weeks review	119.22	10.17
16 weeks review	123.33	11.20
24 weeks review	105.20	7.98

Ingredients and Actions of *Ba Zhen Tang*

%	English Name	Chinese Pin-Yin	Action
15	Angelica	<i>Dang Gui</i>	Nourish Blood and activate Blood circulation
10	Ligusticum	<i>Chuan Xiong</i>	Move Qi and Blood to alleviate pain
15	Paeonia	<i>Bai Shao</i>	Nourish Blood and nourish Yin
20	Prepared Rehmannia	<i>Shu Di Huang</i>	Tonify Blood and nourish Yin
10	Ginseng	<i>Ren Shen</i>	Replenish Yuan Qi, tonify Spleen and Lung, Promote production of Body Fluids calm the Mind
15	Atractylodes	<i>Bai Zhu</i>	Tonify Spleen, tonify Qi and dry Dampness
10	Poria	<i>Fu Ling</i>	Strengthen Spleen, drain Dampness, promote urine production
5	Glycyrrhiza	<i>Gan Cao</i>	Harmonize effects of other herbs

Ingredients and Actions of *Xue Fu Zhu Yu Tang*

%	English Name	Chinese Pin-Yin	Action
16	Persica	<i>Tao Ren</i>	Break Blood Stasis
12	Carthamus	<i>Hong Hua</i>	Invigorate Blood, dispel Blood stasis and pain in chest
12	Angelica	<i>Dang Gui</i>	Nourish Blood, invigorate Blood
6	Ligusticum	<i>Chuan Xiong</i>	Invigorate Qi and Blood, relieve pain
8	Paeonia	<i>Bai Shao</i>	Invigorate Blood, clear Heat and cool Blood
12	Cyathula	<i>Niu Xi</i>	Invigorate Blood and dispel Blood stasis
4	Bupleurum	<i>Chai Hu</i>	Invigorate Liver Qi, relieve constraint
6	Platycodon	<i>Jie Geng</i>	Guide to upper Jiao, benefit throat and lungs
8	Aurantium	<i>Zhi Ke</i>	Move Qi and reduce distension
12	Rehmannia	<i>Sheng Di Huang</i>	Cool Blood, nourish Blood
4	Glycyrrhiza	<i>Gan Cao</i>	Reduce pain, harmonize

Ingredients and Actions of *Yang Xin Tang*

%	English Name	Chinese Pin-Yin	Action
12	Codonopsis	<i>Dang Shen</i>	Tonify Qi
16	Astragalus	<i>Huang Qi</i>	Tonify Qi
8	Glycyrrhiza	<i>Gan Cao</i>	Tonify Qi
10	Poris	<i>Fu Ling</i>	Drain Damp, strengthen Spleen
8	Ligusticum	<i>Chuan Xiong</i>	Move Blood
8	Angelica	<i>Dang Gui</i>	Nourish Blood
8	Biota	<i>Bai Zi Ren</i>	Tonify Heart
10	Polygala	<i>Yuan Zhi</i>	Tonify Heart
10	Schisandra	<i>Wu Wei Zi</i>	Astringently consolidate
10	Cinnamomum	<i>Rou Gui</i>	Warm Yang

Ingredients and Actions of *Zhi Bai Di Huang*

%	English Name	Chinese Pin-Yin	Action
12	Anemarrhena	<i>Zhi Mu</i>	Clears Heat, nourish <i>Yin</i>
12	Phellodendron	<i>Huang Bai</i>	Clears Heat, nourish <i>Yin</i>
24	Rehmannia	<i>Shu Di Huang</i>	Nourish <i>Yin</i> Blood and <i>Jing</i>
12	Cornus	<i>Shan Zhu Yu</i>	Nourish <i>Yin</i>
12	Dioscorea	<i>Shan Yao</i>	Tonify <i>Qi</i> , nourish Kidney <i>Jing</i>
9	Moutan	<i>Mu Dan Pi</i>	Cool Liver
9	Poria	<i>Fu Ling</i>	Drain Damp, strengthen Spleen
9	Alisma	<i>Ze Xie</i>	Drain Damp, clear Kidney false heat

Ingredients and Actions of *Liu Wei Di Huang*

%	English Name	Chinese Pin-Yin	Action
32	Rehmannia	<i>Shu Di Huang</i>	Tonify Kidney <i>Jing</i> , nourish <i>Yin</i> and Blood
16	Cornus	<i>Shan Zhu Yu</i>	Tonify the Liver and Kidney <i>Yin</i> , tonify Blood
16	Dioscorea	<i>Shan Yao</i>	Tonify Spleen <i>Qi</i>
12	Alisma	<i>Ze Xie</i>	Eliminate water retention and purge false Fire
12	Moutan	<i>Mu Dan Pi</i>	Dissipate the Blood Stagnation
12	Poria	<i>Fu Ling</i>	Strengthen the Spleen, induce diuresis, excrete Dampness

Ingredients and Actions of *Sang Hwang 125*

%	English Name	Chinese Pin-Yin	Action
400g	<i>Phellinus linteus</i>	<i>Sang Huang</i>	Clears Damp-Heat and Stomach Fire, resolves Phlegm, invigorates Blood, stops bleeding and relieves pain
50%	Polysaccharide (beta glucan 1-3, 1-6)		
50%	Triterpenoids Polyphenol		

Ingredients and Actions of *Sang Hwang LD*

%	English Name	Chinese Pin-Yin	Action
400g	<i>Phellinus linteus</i>	<i>Sang Huang</i>	Clears Damp-Heat and Stomach Fire, resolves Phlegm, invigorates Blood, stops bleeding and relieves pain
100%	Polysaccharide (beta glucan 1-3, 1-6)		

## REFERENCES

1. Xie H, Hershey B. Chinese Herbal Medicine for the Treatment of Cancer. AJTCVM 2015;10(1):69-75.
2. Beinfield H, Korngold E. Chinese Medicine and Cancer. Alternative Therapies in Health and Medicine 2003;9(5):38-52.
3. Chetboul V, Claudio B, Madron E. Clinical Echocardiography of the dog and cat. United States of America: Elsevier Inc. 2012: 272-282.
4. Ware WA, Hopper DL. Cardiac Tumors in Dogs: 1982-1995. Journal of Veterinary Internal Medicine 1999;13:95-103.
5. Xie H, Preast V. Xie's Chinese Veterinary Herbology. Iowa, USA: Blackwell Publishing. 2010:305, 314, 316, 321, 327-328, 451.
6. Heuertz J. Herbal Support for Cancer Patients. Herbal Medicine Press 2006:1-29.
7. Xie H, Hershey B, Ma A. Review of Evidence-based Clinical and Experimental Research on the Use of Acupuncture and Chinese Herbal Medicine for the Treatment or Adjunct Treatment of Cancer. AJTCVM 2017;12(1):69-77.
8. Zhu T, Kim SH, Chen CY. A Medicinal Mushroom: Phellinus Linteus. Current Medicinal Chemistry. 2008;15(13): 1330-1335.
9. Wu SH, Dai YC, Hattori T et al. Species clarification for the medicinally valuable 'sanghuang' mushroom. Botanical Studies. 2012;53:135-149.
10. Silva D. Medicinal Mushroom Phellinus linteus as an Alternative Cancer Therapy (Review). Experimental Therapeutic Medicine. 2010,1(3):407-411.
11. Samchai S, Seephonkai P, Sangdee A, Puntumchai A, and Klinhom U. Antioxidant, Cytotoxic and Antimalarial Activities from Crude Extracts of Mushroom Phellinus linteus. Journal of Biological Sciences 2009;9(7):778-783.
12. Hsieh PW, Wu JB and Wu YC. Review article: Chemistry and biology of Phellinus linteus. Biomedicine 2013;3:106-113.
13. Silva D, Jedinak A, Kawasaki J, Harvey K and Silvova V. Phellinus linteus suppresses growth, angiogenesis and invasive behaviour of breast cancer cells through the inhibition of AKT signalling. British Journal of Cancer 2008;98(8):1348-1356.

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# CASE REPORT: CANINE

## Successful treatment of Heartworm (*Dirofiliria immitis*) Disease with Herbal Therapies in a Dog with Two Failed Treatments with Macrocytic Lactones.

by Cynthia Lankeau, DVM, CVA, RH (AHG)

### Abstract:

A successful treatment of Heartworm (*Dirofiliria immitis*) disease in a macrocytic lactones and melarsomine resistant dog was achieved in three and a half months with the use of several herbal products targeting not only the nematode but also the Wolbachia organism, while concurrently supporting the cardiovascular and pulmonary system. In such cases, the individual constitution and unique responses to the disease regression determines the specific botanical medicines required.

### Introduction:

Veterinarians rely on macrocytic lactones (MLs) to protect their patients from Heartworm disease. Evidence from recent research has shown that sub-populations of Heartworm have developed resistance to MLs (1). Every compound currently marketed in every form of administration (oral, topical, and parenteral) has been shown to be less than perfect in at least one study (2). This incidence of resistant is increasing (3). In the face of this increasing drug resistance, effective alternative therapies must be explored. In contradiction to the American Heart Worm Society, through personal communications with other veterinarians and in personal practice, there have been successful treatments of Heartworm positive dogs with herbs although none of these cases have been published before now. Botanical medicines have historically been used to kill offending parasites and also have a general physiologic supportive influence on the cardiovascular system during treatment which can result in a more satisfactory treatment and recovery from this type of parasitic infestation. Botanical medicines have a generalized physiological effect. In these cases, botanicals are used to 'soothe' blood flow, remove obstructions of blood flow, and eliminate Blood Stagnate. Wolbachia bacteria are obligate mutualistic endosymbionts in nematodes. Veterinary scientists have recently discovered both phylogenetic and biochemical evidence for the obligate symbiosis of *D. immitis* and the bacteria *Wolbachia pipientis*. The apparent mutualistic dependency has also offered a novel approach to devitalize the nematode through the use of anti-bacterial and anti-rickettsia botanicals which can eliminate the Wolbachia organisms (4,5). The Wolbachia activation of innate inflammation drives inflammatory adverse events in response to chemotherapy with either diethylcarbamazine (DEC) or ivermectin (33) making the need for alternative treatments more imperative.

### CASE REPORT:

**Signalment:** Scooter-a 7 year male, castrated, 45 pound Pit Bull cross.

**History:** In spring of 2013, Scooter was found to be heart worm (*Dirofiliria immitis*) positive in a Kentucky pit bull rescue organization. The history stated that he was treated in compliance with the American Heartworm Society's official standards of doxycycline and a macrocytic lactone prior to the three-dose regimen of melarsomine (one injection of 2.5 mg/kg body weight followed at least one month later by two injections of the same dose 24 hours apart). Immediately after treatment, he was sent to NY to another adoption group. In December of 2013, he was found to be still positive. He was reported to have been retreated with doxycycline and a macrocytic lactone prior to the three-dose regimen of melarsomine (one injection of 2.5 mg/kg body weight followed at least one month later by two injections of the same dose 24 hours apart (2). In May of 2014, he was adopted.

**Initial presentation and exam:** 6/1/14, Scooter was brought for a 'wellness' exam, with a chief complaint of anxiety and rapid breathing and occasional cough. His tongue color was purple, deep red edges, congested sublingual veins with very harsh lung sounds; heart rate was rapid and pulse was taut and slippery with a severe choppy quality. He exhibited pain on the acupuncture points Bl 14, 15, 18 and 20.

**Western Medical diagnosis:** Heartworm (*Dirofiliria immitis*) infection via a Witness: Canine Heartworm Antigen Test (Zoetis)

**Chinese Medical diagnosis:** Blood stagnation, pathogenic phlegm, channel obstruction with secondary Blood Heat with Shen disturbance

With the history of two recent apparently unsuccessful Heartworm treatments, Scooter's owner requested an alternative approach. In Traditional Veterinary Chinese Medicine (TCVM), the treatment goals would be to soothe the Blood Stagnation, clear Blood Heat, clear pathologic phlegm and open obstructions. Herbs with these effects would need to also protect his cardiovascular system, ensure minimal health risks from 'dying worms' due to their anti-thrombi effect, and remove pathologic phlegm all while exerting an anti-nematode and antibacterial effect (to weaken and kill the Heartworm parasites and to kill the *Wolbachia* organisms). Due to the synergistic relationship of the *Wolbachia* organisms and *Dirofiliria immitis*, a strong intention was to focus anti-*Wolbachia* botanicals with the thought that the nematodes would 'die off' easier with less thrombic concerns. In TCVM, the Shen or Spirit resides in the Blood and is housed in the Heart, by soothing the Blood, and clearing Blood heat, there would be a strong anti-anxiety effect.

**Prescription:** Scooter's initial prescription consisted of 1. A formula made by Paw Healer called 1. Empirical Lung and Heart; this formula has was designed to kill nematodes (a product claim through case studies) while soothing Blood flow; and removing obstructions (Heartworms) and phlegm in the lungs. Dose: 1 tsp twice a day; 2. Black Walnut, *Juglans nigra*, (b) for additional anti-nematode effect with concurrent endocrine support; Dosage: 5 drops of a 1:5 tincture; and 3. A tincture consisting of 15 % *Andrographis*, *Andrographis paniculata*, (c) 15 % Sweet Annie, *Artemisia annua* (b) to have an anti-*Wolbachia* effect in 70 % Blood's Mansion, Xue Fu Zhu Yu Tang (b) as a carrier to the heart, to calm anxiety, and for additional effect on removing Blood Stagnation, and finally (d) 10 drops 1:5 *Houttuynia cordata* (b) as additional antimicrobial and anthelmintic actions.

**Concurrent advice:** Scooter's owner was advised to give a diet high in anti-oxidants and to keep him relatively quiet. She was to watch his respiration and tongue color.

#### **FOLLOW UP:**

Scooter's owner reported that he was bright and alert with good appetite. His coughing had stopped and he only had occasional periods of more rapid breathing. On June 30 th, her horses got loose, Scooter had spent 4 hours running very hard, chasing the horses. He immediately began breathing faster.

**7/1/14:** Scooter was panting very hard, with a purple tongue and exhibiting a greater sense of anxiety Bronchial sounds were very heavy; with areas in the lung field devoid air sounds. It was suspected that during the exertion of horse chasing; he had 'thrown' several pulmonary emboli. His herbal formula was changed to Stasis Breaker (JT) for a strong anti-thrombi effect, at a dose of 1 teaspoon twice a day, and 10 drops of Blood root, *Sanguinaria canadensis*, for a presumed hepatization of pulmonary tissue. Blood Mansion tincture was continued. Black Walnut was also discontinued to slow the die off of nematodes.

**7/6/14:** Phone update - breathing was back to normal.

**8/1/14:** Scooter was acting normal, with normal appetite and respiration. His tongue color was pink, slightly lavender, and his pulse was slightly taut. On palpation, Bl 18 was very painful which indicated Scooter had some residual Liver stagnation. Stasis Breaker was discontinued. He was started on Ge Xie Zhu Yu Tang, Dispel Stasis in the Middle (d), a formula for hepatic circulation. He resumed the Black Walnut and Blood Mansion combination.

**8/15/14:** Scooter was reported to be acting normal with pink tongue and easy breathing, with no cough. He seemed much calmer to her.

**9/15/14:** Scooter was heart worm negative via a Witness: Canine Heartworm Antigen Test (Zoetis). Scooter's tongue was pink, his heart rate was normal, and his pulse was smooth. No abnormal lung sounds were heard. He was calm.

## DISCUSSION:

This case reflects that herbal medicines can successfully treat Heartworm disease in a clinically affected individual. The herbal medicines were able to not only successfully kill the Heartworm parasite but also had lifesaving cardiac and pulmonary supportive actions with presumed anti-thrombi effects. This case also illustrates the flexibility of herbal treatment to easily shift to accommodate the changing pattern of disease presentation. The various botanical medicines used have a long history of traditional usage which is reinforced by current scientific research. The cardiac, circulatory, and pulmonary supportive effects with anti-bacterial and anti-nematode influence of the leading herb formula illustrates the power of botanical medicine.

Empirical Lung and Heart Qi Support is a formula designed by PawHealer (a), (see Figure 1), to Soothe Qi and Blood flow in the Heart and Lungs. The effectiveness of this formula is revealed when examining the botanical medicines contained in the formula. *Trichosanthes* fruit, *Trichosanthes japonica*, *T. kirilowii*, *Gua Lou Shi*; is traditionally known to clear the Lungs, dissolves phlegm; regulates Qi, expand the chest, dissipate nodules and eliminate pus (6). Current research supports these traditional actions showing it has strong controlling abilities in the lung, anti-cancer (7), and anti-toxicity effects (8), and cardioprotective (9) effects. *Sparganium*, *Sparganium stoloniferum*, breaks up and dispels blood stasis, activates Qi circulation and relieves pain. Research has validated these traditional uses, illustrating anti-oxidative effects (10) and anti-cancer effects, especially in the liver (11). There is also a recognized influence to inhibit aggregations of platelets and prolong thrombin time (12). *Curcuma zedoaria* has research supporting its traditional ability to invigorate Blood circulation, break Blood stasis, and activate Qi circulation. Therefore this herb prolongs the aggregation of platelets and prevents the formation of thrombi. It also has anti-microbial, antiplasmodial (13), and antibacterial effects, and shows very strong anti-nematode effects (14,15). Additionally, there are clinical reports of *Curcuma zedoaria* clinically curing individuals with psychiatric disorders with Blood stasis (16). Scooter's mental state, that of severe anxiety, was considered to be due to Blood stagnation (Heartworm disease). Scooter had an equally impressive response. *Alismatis orientalis* regulates water circulation, resolves Dampness, and clears deficiency Fire from the Kidney. This herb has an ability to decrease drug resistance (17). *Xing Ren*, *Prunus armeniaca* clinically is used to arrest cough and relieves wheezing. These actions are supported by research showing strong anti-bacterial effects and the elimination of bacteria in biofilms (18). *Crataegi Fructus*, *Crataegus cuneate*, *Shan Zha*, is a popular botanical medicine for cardiac support. Traditionally it is said to activate Blood circulation and disperses Blood stagnation, thereby treating cardiovascular disorders and eliminating stagnation with demonstrated cardiostimulant, vasodilating, antihypertensive, and antimicrobial effects (19, 20). *Tao Ren*, *Persicae Semen*, *Prunus persica*, is traditionally used for activating Blood circulation and moving Blood stasis while also helping drain pulmonary abscesses. This herb has proven antibacterial and antioxidant effects (21) with strong Blood controlling effects in the chest (22). *Hong Hua*, *Carthamus tinctorius*, is another herb that traditionally activates blood circulation, eliminates Blood Stasis, and opens channels. It is also another herb with demonstrated antibacterial effects (23). *Di Long*, *Lumbricus*, is an antipyretic, it inhibits formation of thrombi and facilitates their dissolution, it opens channels (24), with a protective effect on the internal organs (25). *Di Long* has antimicrobial effects which are crucial to counter the *Wolbachia* organisms (26). *Chuan Xiong*, *Ligusticum chuanxiong*, is another blood invigorating and stasis-removing herb that activates Qi and Blood circulation with antiplatelet and anticoagulant effects (27) with activity to increase blood perfusion, and demonstrated to have antibacterial effects (28). *Black Walnut*, *Juglans nigra*, has a long traditional use as an effective antihelmintic, antiparasitic herb (29). It was used in this case to reinforce the antihelmintic effect of *Curcuma* with additional thyroid support (36). The ability of botanicals to eliminate *Wolbachia* organisms (34) opens a vast potential for botanicals to treat Heartworm disease easily in a safe manner. Two botanicals with evidence of effect against *Wolbachia* are *Sweet Annie*, *Artemisia annua* (30), and *Andrographis*, *Andrographis paniculata* (31, 32). *Houttuynia cordata* has a wide range of actions, including antiviral, antibacterial, antifungal, antimicrobial, anthelmintic, and larvicidal. The herb has a specific affinity for the chest and lungs. This herb has been found to significantly increase IL-10, the cytokine synthesis inhibitory factor, and anti-inflammatory cytokine. It downregulates the other cytokines and blocks NF- $\kappa$ B activity (33).

As Scooter's treatment progressed, he had a presumed thrombi crisis after a period of severe exertion. This life threatening episode was diagnosed as Blood stagnation and treated with Stasis Breaker (c), a proprietary formula specifically crafted by Jing Tang herbals for cancer. Formula contains *Fritillaria*, *Zhe Bei Mu*; *Ostrea*, *Mu Li*; *Sparganium*, *San Leng*; *Zedoary*, *Er Zhu*; *Scutellaria*, *Ban Zhi Lian*; *Oldenlandia*, *Bai Hua She She Cao*. *Blood root*, *Sanguinaria canadensis*, is considered specific for pulmonary hepatization. After the pulmonary thrombi were resolved, a slight hepatic imbalance was detected via sensitivity on BI 18. With the flexibility of botanical medicine, there was a shifting of "Blood Moving" herbs to those that influence primarily the Liver, *Ge Xie Zhu Yu Tang*, this physiologic imbalance was rectified.

## CONCLUSION:

In three and a half months, an anxious rescue dog that had two failed Heartworm, with persistent Heartworm, was successfully treated with botanical medicines. The Heartworm infection and the anxiety resolved. Botanical medicines have a flexibility to treat complex physiological disease states, in this case, the severe stagnation of Blood within the heart with secondary pulmonary pathogenic phlegm. Botanicals also have a wide ability to influence various microbial and parasitic organisms. Since pharmaceuticals have single molecular effects, it is possible for microbes to develop resistance. The emergence of macrocyclic lactone resistance in the canine Heartworm (35) and the potential for botanical intervention deserves consideration by the veterinary profession.

Figure 1: Empirical Lung and Heart Qi Support: Paw Healer

Chinese Name	Botanical Name
Gou Lou Shi	Trichosanthis Fructus
San Leng	Rhizoma Sparganii
E Zhu	Curcuma Zedoaria
Ze Xie	Alismatis
Xing Ren	Armeniaca Semen
Shan Zha	Crataegi Fructus
Tao Ren	Persicae Semen
Hong Hua	Carthamus Tinctorius
Di Long	Lumbricus
Chuan Xiong	Radix Ligustici

## Footnotes:

- Paw Healer, San Diego, CA; 877-255-388
- Herbalist and Alchemist; Washington, NJ 07882; 1-800-611-8235
- Jing Tang Herbs, Reddick, FL 32686
- Kan Herbal, Santa Cruz, CA 1-800-543-5233

## References:

- Martínez-Valladares M, Geurden T, Bartram DJ, et al; 2015; Resistance of gastrointestinal nematodes to the most commonly used anthelmintics in sheep, cattle and horses in Spain; *Vet Parasitol.* 2015 Jul 30;211(3-4):228-33
- <https://www.heartwormsociety.org/images/pdf/Canine-Guidelines-Summary.pdf>
- Awadzi K, Boakye DA, Edwards G, et al.: An investigation of persistent microfilaridermias despite multiple treatments with ivermectin, in two onchocerciasis-endemic foci in Ghana. *Ann Trop Med Parasitol* 2004, 98:231–249.
- Current Infectious Disease Reports; 2007, Wolbachia in filarial parasites: Targets for filarial infection and disease control; January Volume 9, Issue 1, pp 55–59
- Taylor MJ, Bandi C, Hoerauf A: Wolbachia bacterial endosymbionts of filarial nematodes. *Adv Parasitol* 2005, 60:245–284
- Chen and Chen, 2004; Chinese Medical Herbology and Pharmacology, Art of Medicine Press, Inc., City of Industry, CA.
- Ni L, Zhu X, Gong C; et al; 2015; Trichosanthes kirilowii fruits inhibit non-small cell lung cancer cell growth through mitotic cell-cycle arrest; *Am J Chin Med.* 2015;43(2):349-64.
- Bhattacharya S, Halder PK., 2013; Trichosanthes dioica fruit extract ameliorates arsenic-induced brain toxicity in male albino rats. *J Environ Pathol Toxicol Oncol.*;32(2):141-8
- Shah SL1, Mali VR, Zambare GN; 2012; Cardioprotective Activity of Methanol Extract of fruit of Trichosanthes cucumerina on Doxorubicin-induced Cardiotoxicity in Wistar Rats; *Toxicol Int.*; May;19(2):167-72
- Wang X, Wu Y, Wu Q, et al; 2015; Antioxidant activities in vitro and in vivo of water-soluble polysaccharide isolated from Sparganium stoloniferum Buch.-Ham; *Pak Pharm Sci.* 2015 Jan;28(1):147-51
- Bateman HR1, Liang Q, Fan D, et al, 2013; Sparstolonin B inhibits pro-angiogenic functions and blocks cell cycle progression in endothelial cells; *PLoS One.* Aug 5;8(8):

12. Chang, Y; Zhong Y, Cheng F, et al, 1994, A Handbook of the Composition and Pharmacology of common Chinese Drugs, 175-176.
13. Busari ZA, Dauda KA, Morenikeji OA, et al, 2017; Antiplasmodial Activity and Toxicological Assessment of Curcumin PLGA-Encapsulated Nanoparticles; *Front Pharmacol.*; Sep 6;8:622
14. Alrubaie AL., 2015; Effects of alcoholic extract of *Curcuma longa* on *Ascaridia* infestation affecting chicken; *Indian J Exp Biol.* 2015 Jul;53(7):452-6
15. Jurgens TM1, Frazier EG, Schaeffer JM, 1994; Novel nematocidal agents from *Curcuma comosa.*; *J Nat Prod.* 1994 Feb;57(2):230-5
16. Zhong Xi Yi Jie He Za Zhi, *Journal of Interated Chinese and Western Medicine*, 1988; 10:638
17. Fong WF1, Wang C, Zhu GY, et al; 2007; Reversal of multidrug resistance in cancer cells by *Rhizoma Alismatis* extract; *Phytomedicine.*; Feb;14(2-3):160-5.
18. Wong RW1, Hägg U, Samaranyake L, et al; 2010; Antimicrobial activity of Chinese medicine herbs against common bacteria in oral biofilm. A pilot study; *Int J Oral Maxillofac Surg.*; Jun;39(6):599-605.
19. Liu LT, Zheng GJ, Zhang WG, et al; 2014; Clinical study on treatment of carotid atherosclerosis with extraction of *polygoni cuspidati rhizoma et radix and crataegi fructus*: a randomized controlled trial]; *Zhongguo Zhong Yao Za Zhi.*; Mar;39(6):1115-9
20. Qin R, Xiao K, Li B, et al; 2013; The combination of catechin and epicatechin callate from *Fructus Crataegi* potentiates beta-lactam antibiotics against methicillin-resistant *staphylococcus aureus* (MRSA) in vitro and in vivo; *Int J Mol Sci.*; Jan 16;14(1):1802-21.
21. Belhadj F, Somrani I, Aissaoui N, et al; 2016; Bioactive compounds contents, antioxidant and antimicrobial activities during ripening of *Prunus persica* L. varieties from the North West of Tunisia; *Food Chem.* 2016 Aug 1;204:29-36
22. Noratto G, Porter W, Byrne D, et al; 2014; Polyphenolics from peach (*Prunus persica* var. Rich Lady) inhibit tumor growth and metastasis of MDA-MB-435 breast cancer cells in vivo; *J Nutr Biochem.*; Jul;25(7):796-800
23. Salem N1, Msaada K1, Elkahoui S1, et al; 2014; Evaluation of antibacterial, antifungal, and antioxidant activities of safflower natural dyes during flowering; *Biomed Res Int.*;2014:762397
24. Joo SS, Won TJ, Kim JS, et al; 2009; Inhibition of coagulation activation and inflammation by a novel Factor Xa inhibitor synthesized from the earthworm *Eisenia Andrei*; *Biol Pharm Bull.*; Feb;32(2):253-8.
25. Wang Q, Duan LX, Xu ZS, et al; 2016; The protective effect of the earthworm active ingredients on hepatocellular injury induced by endoplasmic reticulum stress, *Biomed Pharmacother.*, Aug;82:304-11
26. Andleeb S, Ejaz M, Awan UA, et al; 2016; In vitro screening of mucus and solvent extracts of *Eisenia foetida* against human bacterial and fungal pathogens; *Pak J Pharm Sci.*; May;29(3):969-77
27. Dang X, Miao JJ, Chen AQ, et al, 2015; The antithrombotic effect of RSNK in blood-stasis model rats; *J Ethnopharmacol.*; Sep 15;173:266-72.
28. Li Y, Xu C, Zhang Q, et al, 2005; In vitro anti-*Helicobacter pylori* action of 30 Chinese herbal medicines used to treat ulcer diseases; *J Ethnopharmacol.*; Apr 26;98(3):329-33.
29. Guarrera PM, 1999, Traditional antihelmintic, antiparasitic and repellent uses of plants in Central Italy; *J Ethnopharmacol.*, Dec 15;68(1-3):183-92.
30. Ivarsen E, Fretté XC, Christensen KB, et al, 2014; Bioassay-Guided Chromatographic Isolation and Identification of Antibacterial Compounds from *Artemisia annua* L. That Inhibit *Clostridium perfringens* Growth., *J AOAC Int.*; Sep-Oct;97(5):1282-90
31. Banerjee M, Parai D, Chattopadhyay S, et al, 2017; Andrographolide: antibacterial activity against common bacteria of human health concern and possible mechanism of action, *Folia Microbiol (Praha).*, May;62(3):237-244.
32. Arifullah M, Namsa ND, Mandal M, 2013, Evaluation of anti-bacterial and anti-oxidant potential of andrographolide and echiodinin isolated from callus culture of *Andrographis paniculata* Nees; *Asian Pac J Trop Biomed.*; Aug;3(8):604-10; discussion 609-10.
33. Buhner, S; 2015; *Natural Treatments for Lyme coinfections*, Healing Arts Press, Rochester, Vermont.
34. Francesca Tamarozzi, Alice Halliday, Katrin Gentil, et al; 2011; Onchocerciasis: the Role of Wolbachia Bacterial Endosymbionts in Parasite Biology, Disease Pathogenesis, and Treatment; *Clin Microbiol Rev.*; Jul; 24(3): 459–468
35. Wolstenholme AJ, Evans CC, Jimenez PD, et al; 2015; The emergence of macrocyclic lactone resistance in the canine Heartworm, *Dirofilaria immitis*; *Parasitology.*; Sep;142(10):1249-59.
36. Pant N, Padel KR, Karki R; 2016; Phytochemical profile and biological activity of *Juglans regia*; *J Integr Med*; Sept; 14 (5):359-73.

# AN ICELANDIC HERBAL EXPEDITION

In July of 2017, a small group of veterinarians, many of whom are VBMA members, went to Iceland to study with Bryndís Pétursdóttir. The class was to teach us how to connect with Nature Spirits, elves in particular. While in class, it was impressed upon us that it is critical for us to be connected to nature; to appreciate nature. For both us and the etheric world this connection is crucial for the well-being of all. Iceland has such a sense of raw untamed nature. It was no surprise why the majority of Icelandic people can connect with Nature Spirits. The Icelandic Plants are vibrant; it was incredible to meet these plants. During one of our classes, I was struck with the thought from our teachers that there is a Goddess in the face of every Flower. Here are a few of the Goddesses that we were able to meet!



**Alpine Bistort**, *Bistorta vivipara*, is a common herb seen all over the country. It is an astringent, hemostatic and vulnerary. It can treat tissue states of depression, relaxation; this powerful astringent is cleansing to the gastrointestinal mucous membranes; making it suited to treat putrefaction in the alimentary canal and passive bleeding from the mucosa; loose teeth, gum disease, sore and ulcerated mouth, stomatitis, peptic ulcers; anal fissures; diarrhea, dysentery, cholera, typhoid, and colitis. In the past it was used as food; the entire plant was eaten and the seeds, which were called field corn, were mulled and were thought to be good for baking or with milk.

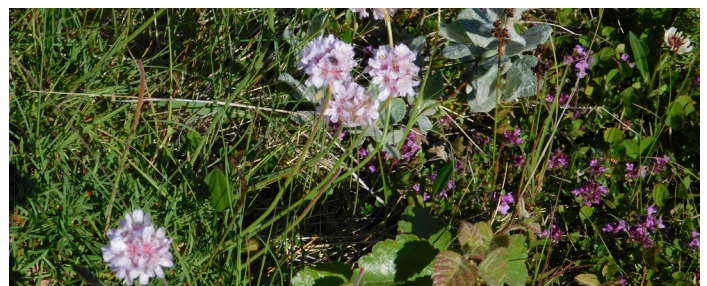
**Biting Stonecrop**, *Sedum acre*, was used for eliminating worms from the bowels. Stonecrop has been used for scurvy, both as a mouthwash for gingivitis and in an infusion to wash wounds characteristic of scurvy. She has also been used for edema, fever, cancer, epilepsy and to lower blood pressure. Pliny used her for insomnia. "Wrap the herb in a black cloth and place it under the pillow of the patient, without his knowledge."



**Butterwort**, *Pinguicula vulgaris* is an insectivorous plant. Although relatively common in Iceland, it is world-wide an endangered herb. This herb is believed to protect both people and their dwelling, especially livestock, milk, and butter. She brings good luck. In the past this herb was used for coughs and lung disease, similar to Sundew; both being used for whooping cough.

**Creeping Thyme**, *Thymus praecox* is found all over the country. It is closely related to *Thymus vulgaris*. This herb has been used for centuries to treat colds, influenza, throat infections, coughs, asthma, and bronchitis. It loosens and dries up mucus in the respiratory tract. She is a good immune stimulant. She also has good power to strengthen tendons. Bjorn Halldorsson, "The wine in which this herb has been steeped heals leg cramps when drunk. It warms the cold stomachs, and also strengthens them. A decoction of this herb is good for coughs, and cures hangovers in the morning for those who have overindulged the night before."

**Devil's Bit Scabious**, *Succisa pratensis*, grows only on slopes facing the sun in the south-west of Iceland and in the Westman Islands. This herb's name refers to how the root ends suddenly, as if it had been bitten off. The legend is that the Devil himself did not like how the plant was revered for its medicinal uses and how much good this plant does for humanity, so he bit off the root. This herb was traditionally used for coughs, fevers and internal inflammations. Externally used for scabies and rashes.



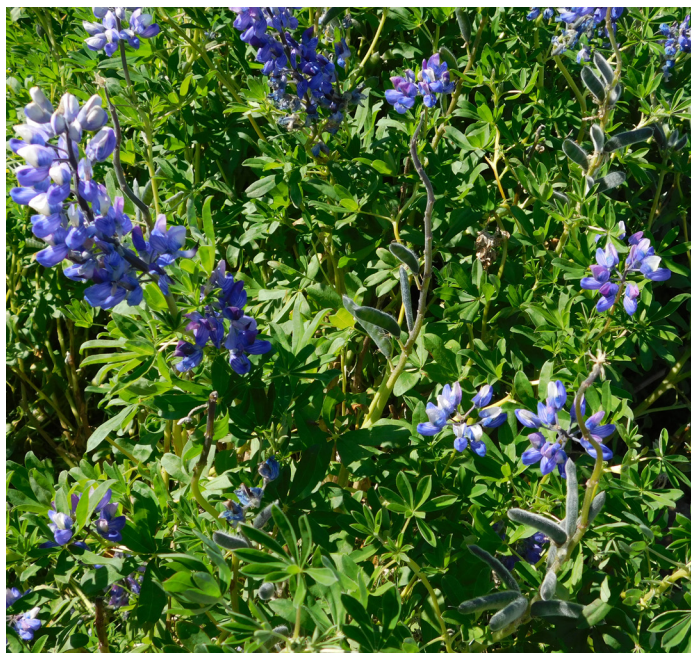
**Grass of Parnassus**, *Parnassia palustris*, is a common wetlands herb. Her translated name means 'Liver herb with white blossoms' She is considered an astringent, sedative, mild diuretic, and vulnerary. As Bjorn stated, "It cures depression...an ale decoction of the herb cures liver pain, head pain, and colds.



**Heather**, *Calluna vulgaris*, has a long history as a healing herb with antibacterial, diuretic, anti-inflammatory effects with mildly sedative, vulnerary actions, with a strengthening action to the kidneys. Heather has a long usage for kidney infections, kidney stones, gout and other arthritic problems. Heather has been used to treat conjunctivitis, stomach cramps, and diarrhea. Through the sedative action, she has been used for insomnia and restlessness. Purple flowers in image at left.

**Lady's Mantle**, *Alchemilla vulgaris* and its related Alpine version, *A. alpinia*, is found throughout Iceland. The alpine version has marked indentations in its leaf. The dew found on the leaves have alchemical powers. Originally used as a woundwort; she treats infections in deep tubes, ears, vagina; helpful after tooth extractions; treats perforated eardrums, mouth sores, and ulcers, laryngitis; she is specific in cases of acute and epidemic diarrhea, diarrheas of relaxed intestines. She can strengthen heart muscles, walls, atria; treats arteriosclerosis; strengthens weak muscles, any relaxed muscle: heart, abdominal walls, uterus, pelvic floor; hernia, anal fistula; she acts as a circulatory tonic, aids blood clotting in wounds, and tones the breasts. According to Matt Wood, "Alchemilla is associated with relaxed tissues that need astringence. Because the veins are more prone to relaxation than the arteries, the latter have strong neuromuscular coats, there may be prominent blue veins. The blood is usually more watery when the tissues are relaxed due to the outflow of fluids, so the skin may be pale and damp with prominent blue veins. Salicylates tend to thin coagulated blood, also reducing venous stagnation and prominence. According to old empirical doctors, lady's mantle has long been used for women who are prone to leucorrhea'.

**Nootka Lupine**, *Lupinus nootkatensis*, was the first herb seen after leaving the airport in Iceland. Its brilliant blue color is an impressive greeting into the country. This herb was introduced and helps to enrich and fix nitrogen into the soil allowing a more rapid plant progression into the more recent volcanic soil. According to Anna Robersdottir, *Lupinus alba* was used medicinally in Europe and the seeds were thought to lower blood sugar, heal wounds, eliminate worms, stimulate menstrual bleeding and act as a diuretic. Lupine seeds contain alkaloids which can cause toxic reaction. If seeds of any Lupine species are used, they should be soaked in water overnight and then rinsed thoroughly before boiling, similar to the cooking of beans. *Lupinus caudatus* is used to clean sores on the faces of infants and then a compress from the powdered leaf is put on the area. Reports have been made on topical use for wounds, earache, nosebleeds, or for eye rinses. In Iceland, Aevar Johannesson began producing a Lupine decoction and giving it to patients for health purposes, i.e. cancer. This decoction also contains *Angelica archangelica*, *Rumex longifolius* and *Parmelia omphalodes*.



**Purple Marshlocks**, *Comarum palustre*, is in the Potentilla family and are valued for their astringent anti-inflammatory action and usefulness in cases of diarrhea, arthritic pain, and gastric pain. This plant is also used both internally and topically on sores with a vulnerary action.

**Roseroot**, *Rhodiola rosea*, is disappearing from Iceland as it cannot tolerate the stress of sheep grazing. Roseroot has protective properties and will ward off 'evil' if the plant lies on the bedside. Recently this herb is classified as an adaptogen and can help with any form of chronic stress, increasing mental and physical stamina treating insomnia, depression, anxiety, restlessness and fatigue.



**Water Avens**, *Geum rivale*, is an astringent, warming antibacterial diaphoretic. Oddar Jonsson Hjaltalin, 'good against diarrhea and epidemics, especially for strengthening after them. It is good against loss of appetite, dysentery and to sprinkle over bad smelling sores.' (Pictured at left is Water Avens, at right, Mountain Avens.)

**Yellow Rattle**, *Rhinanthus minor*, is a common plant found in the grasslands and meadows. She has a good effect on eyes, similar to Eyebright. Yellow Rattle has been called Penny Grass, as children use the seeds as money in games. The decoction can be drunk for coughs. The seeds are used for dysentery and jaundices and cooked and eaten as food. The young herb is also eaten as food with cabbage or decocted as an eye wash.

Our journey was an unforgettable experience - nature is alive and well in Iceland. Our classes with the Elves impressed upon us the importance to cultivate an intimate relationship with nature...all should practice talking to the flowers!!!!



**Reference:** Robertsdottir, Anna Rosa; 2013; Icelandic Herb and their Medicinal Uses; Reykjavik

Article and photos courtesy of Cynthia Lankenau, [NYCAVMA](#). Above photo, riding through fields of Nootka Lupine.

# ACVBM 2017 CONFERENCE REVIEW

by Cynthia Lankeau, DVM, CVA, RH (AHG)



The American College of Veterinary Botanical Medicine celebrated its third annual conference recently in San Diego, California, October 3-4, 2017. Our conference started with an herb walk led by Dr. Ihor Basko. This was a sense based experience with the participants selecting a few plants that 'called' to them. Then sitting in silence with the plant, one attempted to hear them, smell them, sense them, using all of ones sensory capabilities. It was a wonderful experience to just be with the plants (Castor Bean, pictured at left) and to try to discern their personalities without relying on a book for information.

Our lectures on the following day featured both Drs. John Chen and Subhuti Dharmananda. Dr. Chen's lecture discussed integrating Chinese Herbology and Western Pharmacology, specifically the Exterior-releasing herbs, Heat Clearing Herbs, Digestive Herbs, Downward Draining Herbs, Herbs that Regulate Water and Transform Dampness, Wind-Damp dispelling Herbs, and Interior-Warming Herbs.

Dr. Chen mentioned how specific pharmacology describes only a limited aspect of the plant and that the whole plant has a multitude of concurrent effects. A small sample of his lecture: Ma Hung, *Herba Ephedrae*; and Gui Zhi, *Ramulus Cinnamomi* were discussed in relation to the Exterior Wind-Cold disorders. He discussed how the problems with Ma Huang have been the result of improper usage and improper preparation of the herb. Traditionally the joints in the stems are never used. The formula Ma Huang Tang has a safety feature by the concurrent use of Cinnamon with Ephedra as the vasodilation effects of cinnamon counter balance the hypertensive nature of Ephedra. Exterior Wind-Heat Disorders focused on the use of Jing Jie, *Herba Schizonepetae* and Fang Feng, *Radix Saposhnikoviae*. Jing Jie has been shown to inhibit the itch-scratch response induced by substance P. Xiao Feng San, Eliminate Wind Powder, treats Blood Deficient patients with Blood Heat. Xin Yi Hua, *Flos Magnoliae*, opens the nasal orifices and induces mitochondria and caspase-dependent mast cell apoptosis. Cang Er Zi, *Fructus Xanthii* opens nasal passages and relieves pain with its anti-inflammatory activity by suppressing the lipopolysaccharide-induced proinflammatory factors. Dr. Chen continued his lecture discussing Heat Disorders and the different classifications of heat while all of these heats have antipyretic-effects; are anti-infective and anti-inflammatory. The formula Bai Hu Tang, White Tiger Decoction has impressive effect on high fevers when part of a Yang-Ming syndrome. Other herbs discussed were Huang Qin, *Radix Scutellariae*; Huang Lian, *Rhizoma Coptidis*; and Huang Bo, *Cortex Phellodendri Chinensis*. Anti-viral Herbs such as Jin Yin Hua, *Flos Lonicerae Japonicae*; Lian Qiao, *Fructus Forsythiae*; Long Dan, *Radix et Rhizoma Gentianae*, and Dao Di Qu Gong, *Rhizoma Heliminthostachytis* were discussed. Dao Di Wu Gong translates as Dragon footprint on body, and has been found to be very effective as a topical treatment for shingles. We were treated with six hours packed with traditional information and treatment pearls supported by pharmacologic studies.

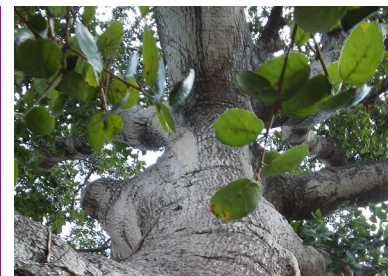
After a break for the ACVBM's annual board meeting, we finished our day with a two hour lecture from Subhuti Dharmananda, Ph. D., titled "Utilizing Traditional Chinese medicine to Treat Infections". Basically he stated that we need to update and modify our traditional and classical Chinese formulas with other Heat Clearing Herbs. He does not feel that the formulas presented in the Shang Han Lun have strong enough anti-viral and anti-bacterial effects for today's world. He proposed incorporating herbs like Hu Zhang, *Polygonum cuspidatum*; and Ban Lan Gen, *Isatis tinctoria* into classic formulas. His talk was thought provoking and a fine ending to an information packed day.



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# VBMA WEBINAR REVIEW

## Dr. Cynthia Lankenau's Lecture on The Energetics of Western Herbs

by Alexia Tsakiris, BVetMed, CVA, GDipVWHM



### THE ENERGETICS OF WESTERN HERBS: THE IMPORTANCE FOR OPTIMAL TREATMENT, WITH SPECIFICS FOR GI CONDITIONS

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Dr. Lankenau gave a fantastic lecture on September 19th, 2017, packed full of information! She brought to light the importance of looking beyond the pharmacological action of the herbs to their energetic actions. By understanding the energetics of herbs, we can use them at a deeper level and appropriately match the energetic needs of our patient to the herb. Cindy focused on examples of herbs used for GI conditions.

There are different energetic considerations recognized in different herbal traditions including Greek, Chinese, Ayurvedic, Native American, Alchemical, Eclectic, and Physiomedical. The Ancient Greeks recognized substances (herbs) to be hot, cold, dry and damp with elements of earth, water, air and fire. Within each substance, there are four degrees to which they may work in the body. Dr. Lankenau reviewed the four degrees within each substance and gave herbal examples along the way. For example Rosemary is a hot herb to the second and Catnip to the third degree. We learned that in Alchemical Medicine, herbs were recognized to have an organ affinity, and the primal essence of the remedy treated the primal or disturbed essence in the sick being. Compared to the Eclectics who looked for a precise remedy for the precise pathological state. For example Tag Alder was used for superficial diseases of the skin or mucus membranes.

Other traditions recognized how the taste of the herb has specific actions associated with it; for example a sour herb is often cooling and astringent. The other tastes to consider are acrid, bitter, astringent, mucilage, oily, salty, sweet, aromatic, spicy, pungent. Medicinal plant actions can be further matched with their substance state; for example hot (excited) states can be treated with sedative or heat clearing/cooling herbs. The energetics of the patient are further classified in Traditional Chinese classifications of Qi, Yang, Yin.

The take home message was we need to learn and understand what the plants are all about, beyond their pharmacology and accumulation of phytochemicals. As herbalists, our goal is to truly know the essence of the plant and to treat the essence of the disharmony. I want to thank Cindy for such an in depth webinar!

For more details, be sure to get the recording, which you can purchase [HERE](#).

# HERBAL MONOGRAPH: KAVA



Photo courtesy [Forest & Kim Starr](#),

**COMMON NAME:** Kava

**LATIN NAME:** *Piper methysticum*

**OTHER NAMES:** Kava Kava, Yangona, Awa

<b>Common Name: Kava</b>	<b><i>Piper methysticum</i> G., Kava kava, yangona, awa</b>
<b>Family</b>	Piperacea
<b>Part Used</b>	Dried rhizome
<b>Active constituents</b>	Kava lactones; kawain, methysticin, dihydromethysticin, demethoxyyangonin, yangonin, pungent resins
<b>Actions</b>	Anesthetizing-mucous membranes; topically antipruritic; anxiolytic, sedative; antispasmodic, antimicrobial, hypnotic, anticonvulsant, mild analgesic, sialagogue, diuretic; (Fyfe considers it to be a stomach tonic and stimulant)  TCM actions: 1. Kidney Qi deficiency with damp; promotes urination and Kidney Qi stagnation; 2. Treats Spleen Damp
<b>Indications</b>	Anxiety-due to fireworks, thunderstorms, stress, separation and other causes, insomnia, nervous tension, muscle relaxant,  Interstitial cystitis and lower urinary tract disorders, chronic catarrhal inflammations, vesical irritation and inflammation; vesical atony; gonorrhoea, gleet; Feline inappropriate elimination; rheumatism, neuralgia, idiopathic or reflex; indigestion; anorexia, gastric atony; pale and edematous tissues, indisposition to exertion; dizziness and despondency ; potential uses in synovial cell sarcoma, uterine cancer; trypanocidal  External: painful wounds and lick granulomas with calendula
<b>Cautions</b>	Concerns over potential hepatotoxicity-caution in cases of acute or chronic hepatic disease or if hepatotoxic drugs are being currently used; continuous use should not exceed 4 weeks. Caution is advised in disorders related to dopamine deficiency, elderly patients, and those with Parkinson's disease; pregnancy, lactation, endogenous depression.  Long term consumption is associated with pellagroid dermatopathy and malnutrition
<b>Contraindications</b>	Pregnancy or lactation, and any existing liver disease
<b>Herb Drug Interactions</b>	May potentiate the effectiveness of centrally acting drugs; alcohol, barbiturates and psychopharmacologic agents, L-dopa.

**Dosage (use animal doses where available, otherwise human doses can be included here but specify)**

External: liniment or lotion for muscle pain

Small animal: Dried herb: 25-300 mg/kg, divided TID; Tincture: 1:2-1:3: 0.5-1.5 ml per 10 kg divided TID

Large Animal: Horse: dried herb: 1-2 tbsp; if tying up 1 tbsp 4 times a day

Human: Dried Herb: 1.7-3.4 g per day (1-10 g daily); tincture 1:2-1:3: 1-4 ml TID; Standardized extract 60-210 g/ Kava pyrones/lactones per day

**Notes:** Native uses in Polynesia-rhizomes are chewed then fermented. Energetics: Pungent, bitter, neutral, dry; Meridians: Kidney, Spleen, Bladder

**Traditional:** ceremonial intoxicating drink; induce relaxation, weight reduction,, treats fungal infection, asthma, colds, cystitis, gonorrhea, headache, menstrual irregularities, urinary infections, and warts.

**Kings:** "neuralgia, particularly of the trifacial nerve, toothache; earache; ocular pain; reflex neuralgia; anorexia; dizziness and despondency; gonorrhea; chronic catarrhal inflammation; vesical irritation ; painful micturition; dysuria."

**Fyfe** wrote: "acts upon the stomach much like the bitter tonics, and markedly increases the appetite. It acts directly upon mucous membranes, quickly restoring their tone. It is one of our best stomachic tonics, and greatly improves digestion and assimilation. In chronic diarrhea it constitutes a useful medicament, and is especially valuable in cases characterized by large catarrhal discharges and associated with an atonic condition of the entire digestive tract; specific action on kidney, in medium dose, it will speedily produce an abundant secretion of limpid urine, which is readily passed. In acute gonorrhea, it is employed with gratifying results...it is employed in gleet with satisfactory results and in leucorrhea it often aids. It is tonic stimulant, sialagogue and diuretic. In Large doses produce an intoxication of a reserved and drowsy nature.

**Felter** adds; "The patient is pale, the urinary product inconstant in quality; the tissues, especially of feet and legs, are edematous; patient is indisposed to exertion, Piper methysticum augments digestion and promotes better assimilation. The glandular activity of the digestive tract is increased, natural secretion and excretion favored, constipation is overcome, and hemorrhoids, if present, are reduced. It also exerts a marked curative influence in chronic intestinal catarrh. In addition to the Genito-urinary effects, which work presumably by decreasing the blood supply by contracting the capillaries; it is of some value in acute vaginitis, chronic bronchitis, rheumatism, and dropsy due to renal inefficiency; remedy for neuralgic pain; neuralgia of the stomach and intestines, and neuralgic and spasmodic dysmenorrhea; abdominal neurosis due to prostatic, urethral or testicular diseases or pectoral neuralgia arising reflexly from nervous dyspepsia.

**Holmes:** urinary remedy with a relaxant, restorative and stimulant action; useful with any condition of pain on urination.

**Published research:** successful for treating anxiety; sedation is not mediated through the GABA receptor complex.

**Recent research:** protects against oxidative stress-induced neuronal cell death through activation of the Nrf2 signaling; in microglial cells, kava strongly inhibited LPS-stimulated iNOS induction and NO production; exerts potent and dose-dependent analgesic activity, inhibiting abdominal constrictions; increases female sexual drives; anti-cancer activities, in a dose-dependent inhibition of cell viability, inhibition of NF-κB, activation of caspases, and activation of extracellular signal regulated kinase 1/2 (ERK1/2) and c-Jun N-terminal kinase (JNK); ERK1/2 and JNK are mitogen activated protein kinases that play central roles in regulating cell fate; kava may reduce colon cancer risk; be a potential therapeutic agent in the treatment of Uterine Leiomyomas; kava root extract reduces tumor growth; has a pro-apoptotic effect on synovial sarcomas and inhibits the growth of synovial sarcomas; prevents and treats adenoid cystic carcinoma; suppresses tumor genesis, reduces tumor growth in hormonal refractory prostate cancer; intervenes in NF-κB-dependent pathological conditions such as inflammation; and has strong antitrypanosomal effects.

# HERBAL MONOGRAPH: ACONITE



Photo courtesy Wikipedia

**COMMON NAME:** Aconite

**LATIN NAME:** *Aconitum carmichaelii*

**OTHER NAMES:** Monks' Hood, Wolf's bane

<b>Common Name: Aconite</b>	<b><i>Aconitum carmichaelii</i>, Monks' Hood, Fu Zi, Wolf's bane</b>
<b>Family</b>	Ranunculaceae
<b>Part Used</b>	Prepared accessory root or branch root
<b>Active constituents</b>	Aconitine, alkaloids; talatisamine; higenamine, salsolinol, coryneine, atisines, aminophenols
<b>Actions</b>	Anti-inflammatory, cardiac tonic  TCM actions: 1. Restores Depleted Yang, it treats Yang failure,  2. Tonifies Yang, Augment fire; in Kidney yang deficiency; cold, impotence, cold low back and knees; Spleen yang deficiency: loose stool and diarrhea; Heart Yang, deep weak pulse;  3. Warms the Channels, disperse Cold and dampness and relieves Pain.
<b>Indications</b>	Critical conditions of faint respiration, icy extremities, diarrhea containing undigested food, faint pulse; shock or heart failure; lower body edema; infertility and impotence; Bi Zheng syndrome due to cold; joint and muscle pain
<b>Cautions</b>	Do not use if consuming alcohol; side effects; overdosing will cause numb lips, tongue, or extremities, nausea or coma; Phaseolus, Lu Dou, is used to reduce the toxicity of Aconite Fu Zi.
<b>Contraindications</b>	Unprocessed herb is TOXIC; even processed herb is contraindicated during pregnancy, if yang excess and yin deficiency; prohibited for young neonatal patients.
<b>Herb Drug Interactions</b>	Fu Zi is incompatible with Bei Mu, Ban Xia, Gua Lou Shi, Bai Ji, and Bai Lian
<b>Dosage (use animal doses where available, otherwise human doses can be included here but specify):</b>	<b>Human:</b> pre-decocted for 30-60 minutes: 3-15 gram  <b>Horses and Cattle:</b> 15-30 g; <b>Llamas, alpacas, goat, sheep and pigs:</b> 3-10g; <b>dogs:</b> 1-3 gram; <b>cats and rabbits:</b> 0.5-1 gram; birds: 0.1-1 g

**Notes:** native to east Asia and Eastern Russia **Energetics:** acrid, hot, sweet, toxic **Organs:** Heart, Kidney, Spleen

**Chen and Chen:** Fu Zi restores depleted yang by tonifying Heart Yang, thus opening channels and collaterals, and by tonifying Kidney Yang to augment fire; Fu Zi treats any type of yang deficiency, as it warms all of the organs and opens all of the channels and collaterals. The organs that are most susceptible to yang deficiency are Kidney, Spleen, and Heart. When prescribing this herb, the condition of the individual must be taken into consideration. Signs of overdose: involuntary salivation, nausea, vomiting, diarrhea, dizziness. (the signs are basically a proving of the herb itself.) Treatment of overdose: Rou Gui, Cinnamon; Sheng Jiang, fresh ginger; Gan Cao, licorice, Huang Lian, Coptis,

**Xie:** Aconite is spicy and hot with a potent effect. It can tonify the Heart Yang in the Upper Burner, Spleen Yang in the Middle Burner and the Kidney Yang in the lower Burner. It is a key herb for treating Yang deficiency or Yang Qi collapse. It is also an excellent herb for severe pain due to Wind-Cold-Damp. It is poisonous when raw; it is processed in a way that detoxifies it by involves soaking the herb in water for 1 week, mixing it with 4% Zingiberis, Sheng Jiang and 2 % Glycyrrhiza, Gan Cao, The herb is again soaked in water for 2 days; then steamed, sliced and dried. Aconite Wu Tou is related to Aconite Fu Zi. Both herbs come from the aconite plant but Wu Tou is the main root while Fu Zi is the branches from the main root. There are two subtypes of Wu Tou; Aconiti Kusnezoffii Radix, Cao Wu and Aconiti Carmichaeli Radix, Chuan Wu; Chuan Wu is hotter, more toxic and stronger for clearing Wind-Cold-Damp Bi than Fu Zi. Cao Wu is usually wild rather than cultivated and is even more toxic and potent than Chuan Wu; it is rarely used.

**Scudder:** The small frequent pulse is the prominent symptom in acute diseases of children. With it alone many cases of infantile fever can be successfully treated. Aconite will be indicated in many cases of tracheitis, bronchitis, and pneumonia, which it relieves the local irritation and hyperemia, in addition to its general sedative effect. Aconite is a favorite remedy in the early stage of tonsillitis, or quinsy. It is the remedy in mucous and in many cases of pseudo-membranous croup. It has a specific influence upon the mucous membrane of the intestinal canal, relieving irritation. Thus it is a very common remedy for diarrhea, combined with ipecac.

**Recent Research:** Fuzi-cake-separated moxibustion at Zhongji (CV 3) and Guanyuan (CV 4) can better prevent post-operative dysuria, effectively promote the functional restoration of the urinary bladder, and control the incidence of post-operative dysuria; has anticancer effects on HepG2 cells and it is a potential reagent for the treatment of HCC; analgesic activities; Aconitum tanguticum has been widely used as a remedy for infectious diseases in traditional Tibetan medicine in China; protective effect in lung injury



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# VMBA ANNUAL HERBWALK

## Featuring Richard Mandelbaum

by Laurie Dohmen, VMD, MS

This year's VBMA herb walk at the AHVMA convention was led by Registered Herbalist, Richard Mandelbaum. Richard is a Clinical Herbalist with a great interest in plant life. He was a perfect choice for the herbwalk. He talked about not only the medicinal uses of the plants, but also their botany. It was fascinating. Some of the plants he discussed included roses, eucalyptus, wild fennel, castor, wood sorrel, willow, evening primrose, and prickly pear. San Diego, with its beautiful weather, provided a plethora of plants for Richard to discuss. We never even made it past the parking lot in 2 hours! A couple of fascinating tidbits from his walk include the fact that plants use fungi to break down nutrients, like we use GIT bacteria. Aspirin got its name from the acetyl group ("a") and the species name of meadowsweet (spirea). Lastly, prickly pear cacti can be like aloe. Overall, it was a well-attended, very educational herb walk that was universally enjoyed. For reference, a collection of photographs from the walk appear below and the page that follows.



*Evening Primrose*



*Rosehip*

*Roses*



*Plantain*



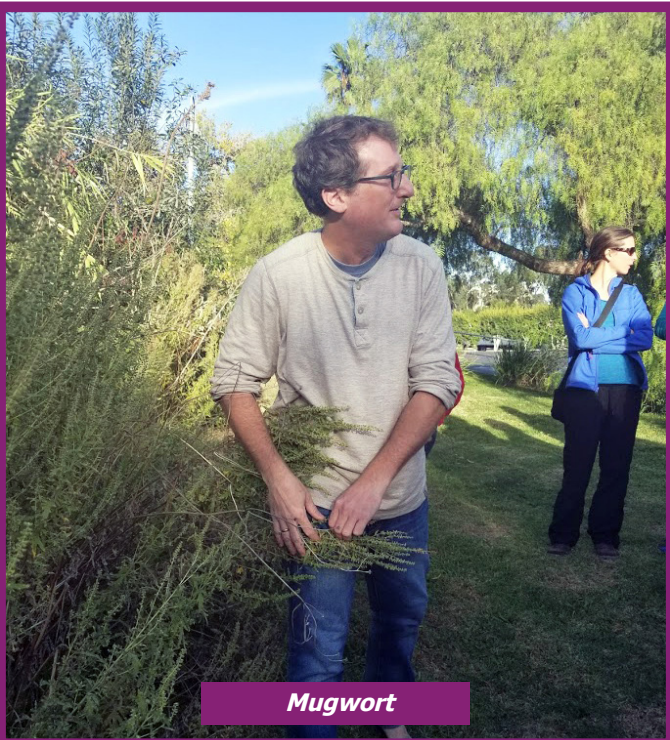
*Willow*



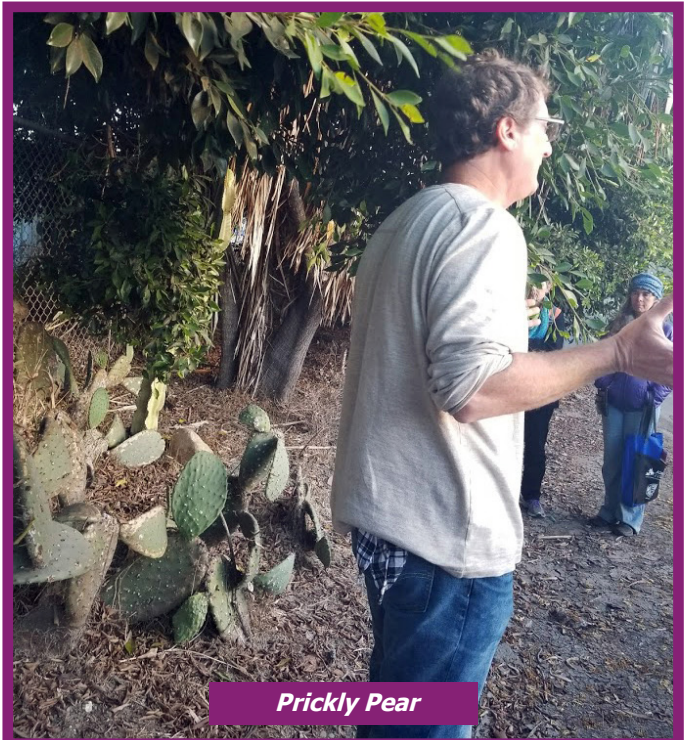
*Wood Sorrel*



*Mugwort*



*Prickly Pear*



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**If you'd like to contribute material (case reports, articles, book reports...anything related to herbal veterinary medicine) for the next journal, simply email our [Communications Coordinator](#), Amy Keane.**



*Image: Alpine Bistort, Icelandic Herbal Adventure 2017*



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