

VBMA

SUMMER/FALL 2015 ISSUE

JOURNAL

of veterinary botanical medicine

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". Nonveterinary 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 2015 the exam will be held in Augusta, GA.

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

Veterinary Botanical Medicine Association



Laurie Dohmen, VBMA President

Greetings!

In this issue that there are recipes for human drinks (instead of the usual recipes for animal food) and an obituary for our esteemed colleague, Gerald "Jerry" Brunetti. It made me start thinking about "holistic" healthcare and the need to start with ourselves. Veterinarians are by nature altruistic people, and we are always being told by the general population that we don't do enough. We all have our stories: I remember the woman who told me that it was my fault she had multiple litters of puppies since she had rescued the dog and I wouldn't spay it for free. I see similar stories almost daily on Facebook, and I know that the veterinarian posting is just looking for affirmation that he/she did the right thing, and doesn't really have to give up her anniversary dinner to see the dog that has been sick for a week, or doesn't have to give a break to the owner who spent \$900 to buy the dog and has nothing left for the parvo it came with. According to Mental Health Daily, veterinarians have the fourth highest suicide rate by profession (Mental Health Daily, 2015). We also are prone to burnout and disease. We all know by now that stress leads to inflammation and chronic inflammation can lead to a variety of diseases, including cancer, heart disease and diabetes.

As holistic veterinarians, I think we need to be extra cognizant of these issues. Holistic healthcare is about the 'whole,' and how can we preach it to our clients if we don't practice it? We need to take care of ourselves mentally and physically or else we can't successfully take care of our patients in a truly holistic manner. I didn't really learn the value of saying "no" in my practice until I became a mother, so I traded one caretaking role for another. It is only recently that I have started genuinely taking care of myself. I do believe it makes me a better mother, veterinarian and person.

There are lots of ways to take care of ourselves. There are small things, like sitting down for a meal with family and friends, reading a book or taking a walk. There are large things, like vacations. I often mix business with pleasure and go on the wonderful ecotours both the VBMA and other organizations offer. I took my sons with me on the VBMA trip to Hawaii, and it was definitely rejuvenating! I have never been to the AHVMA retreat, but I hear it also is good for the 'whole.' How do you rejuvenate? How do you stay healthy and whole? It isn't just for you, but also for all your loved ones and patients.

Laurie

EDUCATIONAL EVENTS

ACVBM First Annual Conference

October 16th, 2015

Augusta, GA - before the AHVMA Conference
Don't miss the American College of Veterinary Botanical Medicine's first annual conference!
All VBMA Members receive a \$30 discount.

AHVMA Annual Conference

October 17th through October 20th 2015

Augusta, GA at the Marriott Convention Center
As always, an exciting event with amazing speakers...view the entire list of events [HERE](#).

VBMA Annual Meeting/Herbwalk

The VBMA Annual Meeting is normally held during lunchbreak on Saturday at the AHVMA Conference. Additional details will be added to the VBMA website when they are available. The Herbwalk will be held October 16th, 2015 at 4 PM, prior to the AHVMA Conference. The Annual Herbwalk is FREE for all VBMA Members!

VBMA Domestic EcoTour 2016

Quinalt, Washington June 12th - 16th

We'll be staying at the Rain Forest Resort Village. There will be hiking, lectures and free time. Details are available on our website.

VBMA EDUCATIONAL SCHOLARSHIP

The Veterinary Botanical Medicine Association currently offers a yearly educational scholarship in the amount of \$500 in order to promote herbal education.

2016 Requirements

A 1000 word essay on "The emerging science of herbal medicine - from tradition to the potential role of herbs in solving some chronic conditions in veterinary medicine", due July 15, 2016. This essay must be sent to the VBMA office at office@vbma.org by this date for consideration. The essay will be read and the award decided by the President and President-Elect of the VBMA. The winning essay will be published in the VBMA journal and on the VBMA website.

Announcement of Award:

The winning essay will be announced at the VBMA's annual meeting at the AHVMA convention of that year.

Use of Award Money:

The recipient of the educational scholarship may use their award money for any AHG (American Herbal Guild) event or class by an RH(AHG), and any CIVT, Chi, IVAS, VBMA or an equivalent veterinary herbal class. Alternatively, the funds may be used for the purchase of herbal books, VBMA CDs, teleconference registrations or similar educational events.

TABLE OF CONTENTS

Case Reports

- 16..... REPORT: Treatment of Secondary Infections Using Herbal Medicine in Canines by Donna Kelleher, DVM
- 18..... REPORT: The Treatment of Nonulcerative Keratitis/Keratouveitis in an Equine with Western Herbs by Cynthia Lankenau, DVM, Colden, NY
- 23..... REPORT: Canine Distemper 'Resurgence', by Cynthia Lankenau, DVM, Colden, NY



A Day in the Life

- 41..... Featuring Cynthia Lankenau, DVM, CVA, RH (AHG), at the Holistic Center for Veterinary Care, Colden, NY



Teleseminar Review

- 29..... Dr. Silver's Cannabis sativa L: A Treasure Trove of Medicinal Benefits reviewed by Cynthia Lankenau, DVM, Colden, NY

2015 ACVBM Conference

- 06..... American College of Veterinary Botanical Medicine First Annual Conference October 16th, 2015 in Augusta, GA

VBMA Masterchef

- 11..... Yummy Herbal Beverages by Cynthia Lankenau, DVM, CVA, RH (AHG) Colden, NY
- 12..... Recipe for Hip Displaysia Food by Constance DiNatale, DVM, Winter Park, FL

Herbal Mongraphs

- 26..... Cannabis, *Cannabis sativa*
- 38..... Saint John's Wort, *Hypericum perforatum*



VBMA NEWS

VBMA ANNUAL MEETING

Our annual meeting will be held on Saturday, October 17th at the AHVMA Annual Conference in Augusta, Georgia - just look for the green tablecloth at lunchtime. We'll be introducing the new board as well as providing you with updates on the following items:

- Strategic Plan and Financial Budget
- EcoTour Plans
- Teleseminars
- Journals
- Website
- Other Educational Programs
- VBMA Educational Scholarship

We encourage all VBMA members who are attending the AHVMA Annual Conference to attend...it's a great opportunity to meet and greet and speak your mind!

VBMA ANNUAL HERBWALK

The 2015 VBMA Annual Herbwalk will be held at Brick Pond Park on Friday, October 16th at 4 PM. We are thrilled to have Susan Wynn, VBMA founder, as our walk leader this year. We'll be walking from the hotel about 1 mile to Brick Pond Park (it is actually on the South Carolina side of the line). More information can be found on their website: <http://www.northaugusta.net/departments/engineering-public-works/stormwater-management/brick-pond-park>. After the walk, people will be welcome to stay in the park or walk back to the hotel as a group.

Our Herbwalk has become increasingly popular over the past several years, and in order to ensure that attendees get the most out of it, we'll be limiting the number of participants to 25. The walk is free for VBMA members, but donations are welcomed.

VBMA 2016 DOMESTIC ECOTOUR

QUINAUT, WASHINGTON JUNE 12th - 16th Have you ever wanted to spend time in the Valley of the Rain Forest Giants? The World Largest Sitka Spruce, a mountain lake and five miles of Quinault Forest trails will be steps from your door on our VBMA domestic EcoTour! The magic of cascading waterfalls, the magnificent Pacific Ocean and endless medicinal plants and soft green moss and lichen-rich forests await you. The rain forest and Olympic Peninsula are world-renowned, and whether you want easy flat hikes along river beds, mountain hikes with views and elevation or a combination of everything the Orcas have to offer, this EcoTour has it all!

This VBMA sponsored USA EcoTour is being held directly after the 2016 combined IVAS/AAVA meeting, June 8-11, 2016 in Tacoma, Washington. Registration information will be posted at www.vbma.org when available. [CLICK HERE](#) for a printable flyer.

SCHEDULE:

Beginning on June 11, 2016, we will be traveling to Rain Forest Resort Village, located at 516 South Shore Road, Quinault, WA 98575. Here we will enjoy three days of herbal lore, hiking in the rainforest, native lore. This is a wonderful resort on Lake Quinault in the heart of the Quinault Rain Forest with fireplace cabins and suites.

LODGING:

We have a room block that will be held until Jan 1, 2016. Reservations can be made by calling 800-255-6936 or 360-288-2535. Make sure to let them know this is the VBMA EcoTour block of rooms. We have a room rate of \$119 for a room, \$165 for a cabin. Participants MUST make their own room reservation and travel arrangements. Car pooling and room sharing is strongly encouraged. To co-ordinate travel and lodging, contact Cindy Lankenau at cyndvm@gmail.com.

Speakers will include Hanna Jordan, Liz Hassinger, Donna Kelleher and Ihor Basko.

ACVBM FIRST ANNUAL CONFERENCE



The American College of Veterinary Botanical Medicine (ACVBM) was established in 2014 to increase the proficiency and competence of veterinarians in the use of medicinal plants, ultimately leading to diplomate status in the specialty of veterinary botanical medicine.

To fulfill this mission, the American College of Veterinary Botanical Medicine will provide a means to reach diplomate status through maintaining a standard base of post-graduate instruction and examination, offer educational opportunities designed to advance experience and proficiency, and enhance the integration of scientific, clinical, and traditional knowledge into veterinary medicine practice for the greater benefit of the health and well-being of animals.

The first annual American College of Veterinary Botanical Medicine conference will take place on October 16th, 2015 in Augusta, GA at the Marriott Convention Center. We've coordinated our conference so it takes place the day prior to the American Holistic Veterinary Medical Association (AHVMA) annual conference/meeting held at the same location. We've scheduled 6 hours of lectures presented by members of our college, finishing up at 4 PM...just in time for the Veterinary Botanical Medicine Association's annual Herbwalk.

Planned speakers and lecture topics are as follows:

Nancy Scanlan: Anti-Cancer Herbs; and Cancer and the Immune System

Ihor Basko: Medical Mushrooms

Dr. Signe Beebe: Herbal Medicine for the Geriatric Pet

Conference Pricing Information:

Regular price is \$180.00

VBMA Member price is \$150.00

Veterinary Student price is \$50.00

Hotel Discount Information:

For those of you attending the AHVMA Conference as well as the ACVBM Conference and will be staying at the Marriott, you are eligible to receive the bulk AHVMA hotel rate for the night of October 15th. Simply call 1-800-868-5354, ask for Reservations and reference the AHVMA Annual Meeting group.

HOW TO REGISTER FOR THE CONFERENCE

You may register for the American College of Veterinary Botanical Medicine 2015 first annual conference by visiting <http://www.acvbm.org/annual-conference.html>. VBMA members receive a \$30 discount off the regular price of \$180.00. We look forward to seeing you there!

NYCAVMA HERBAL TALK: JUDITH SUMNER



On April 8, 2016, the New York Complementary & Alternative Veterinary Association will be sponsoring a talk given by Judith Sumner, plant botanist, herbalist, and faculty member of the Herbal Academy of New England. She will speak for the day on various herbal topics including lessons and information taken from the old herbal texts, current herbal topics, and much more. Her day will be followed by a two day seminar on Pulse and gold bead implants by Dr. Terry Durkes. For more information go to www.nycavma.org or contact Cindy Lankenau, DVM at cyndvm@gmail.com.

In this plant-centered workshop on herbal medicine for veterinarians, we will begin with traditional medicine and ethnobotany, from the Doctrine of Signatures to the evolution of secondary compounds in ecosystems. We will focus on science (while still including some lore and history) to glean lessons from natural history, herbal medicine, Eastern traditions, zoopharmacognosy, and current research in veterinary herbal medicine.

Judith Sumner is a botanist who specializes in ethnobotany, medicinal botany, flowering plants, and plant adaptations. She has taught medicinal botany both at the college level and at botanical gardens, including the Arnold Arboretum of Harvard University and Garden in the Woods and has lectured for the Integrative Veterinary Herbal Medicine Course at Tufts/Cummings School of Veterinary Medicine. She writes and lectures for the Herbal Academy of New England and has been a featured lecturer at the several Herb Society (USA) annual meetings. Judith graduated from Vassar College and completed graduate studies in botany at the University of Massachusetts at Amherst. She studied at the Royal Botanic Gardens, Kew, and at the British Museum (Natural History) and did extensive field work in the Pacific region on the genus *Pittosporum*. She has published monographic studies in the *American Journal of Botany*, *Pollen et Spores*, and *Allertonia*, as well as monographing two families for *Flora Vitiensis Nova*. She is the author of *The Natural History of Medicinal Plants* and *American Household Botany*, which received the American Horticultural Society Book Award in 2005. In 2007 Judith was awarded the Gertrude B. Foster Award for Excellence in Herbal Literature by the Herb Society of America. She is currently writing a botanical history of World War II, tentatively titled *Plants Go to War: A Botanical History of World War II*. Judith is a frequent invited lecturer for botanical and horticultural organizations and symposia, including the New York Botanical Garden, Mohonk Mountain, Cornell University, Maine Garden Day, and Strawberry Banke.

IN MEMORIAM

Gerald "Jerry" Brunetti

by Hue Karreman, VMD, Lancaster County, PA



Jerry Brunetti was a dear friend to me and to many, many others around the world. I had the good fortune to get to know him both professionally and personally. This was also the case for many people as he was such a warm and genuinely friendly person. He always had a way of being able to take really complex theories and facts and distill them down to what the common person can understand. This is probably a main reason that he was so beloved within the natural agriculture sphere. His genius also included being able to formulate products from natural sources to give wonderful synergisms that are both simple yet effective. His love for all types of life in soil, plants, animals and people was always reflected in his approach to problem solving by first describing the big picture, often then going into fine detail, since everything is connected.

He was never at a loss for words and I don't think I will ever know a better story teller within the sustainable and organic agricultural sector. His talks were always lively and inspiring – as AHVMA members know since he was invited repeatedly to speak at the annual conferences. He was perennially featured at the Acres USA conferences, often giving keynote addresses and then many workshops. He loved PASA (Pennsylvania Association of Sustainable Agriculture) and volunteered much time being on the Board. Wherever Jerry went, he energized the audience and assured them that they were on the right path being in natural agriculture.

I always thought of him somewhat as an alchemist-wizard. I knew he read a lot (you should see his library) but at some point one somehow has to make sense of it all for themselves. He did that in spades and could then infuse all that information to others like an orchestra conductor and with wit and humor. But there was also an element there that also seemed to come from the great beyond, with his insights bordering on a modern day Rudolf Steiner, whose theories of the cosmos Jerry enjoyed discussing with me as a Biodynamic enthusiast. I don't know exactly how he synthesized all the information that he did, but the proof of his acumen will stay with us as shown in his product formulas in his company AgriDynamics. And though he owned the company, you'd never have known it when listening to him speaking. He was simply never as interested in materialism and products as he was grand concepts and the glue that helped bridge them down to earth for easy comprehension.

Though Jerry eventually did succumb to lymphoma, he had beaten it decisively 15 years earlier, with fierce determination using only proper foods and supplements. He gave this information away to whoever called him about it. And once on the phone, you'd end up having very long conversations since Jerry loved to explain himself very thoroughly. As one friend once said, she almost needed surgical excision of the phone from her ear after calling Jerry. He gave of himself continually, never turning anyone away who wanted to ask him how to help solve a problem using natural approaches.

Living fairly close by, I got to spend some extra time with Jerry last year. I shared with him some "gifts of the Spirit" which have been granted to me. Though he carried some baggage from growing up Catholic, he greatly enjoyed the energy that flowed through me, a Quaker, on some occasions doing some hands-on Holy Spirit Reiki work with him. It was with deep reverence for his life spirit that I could also help him transition during the last week in hospice. In closing, I will always be thankful in helping him blend back into the universe to meet the ascended masters and the great Creator face to face. Jerry gave so much of himself to others here on earth – may he enjoy the eternal universe and visit with us in our hearts as we go about our task of improving the earth just as he guided us and inspired us to do.

2015 INTERNATIONAL HERB SYMPOSIUM

A Review of IHS 2015

by Laurie Dohmen, VMD, Purple Moon Herbs and Studies, Hartly, DE

I am not surprised International herb Symposium is biannual, I am impressed that they get all the international speakers together like they do in 2 years! International Herb Symposium (IHS) is exactly what the name implies: it is a congregation of renowned herbalists from all over the world. The diversity is awesome, and this year I think they outdid themselves! There were speakers from Haiti, many African and South American countries, all over Europe and even Iceland. They had translators for some speakers. What a turnout!

Not only was there a huge diversity of speakers, but logically their topics followed suit. Every session included the option of an herb walk. There was usually a spiritual option, many therapeutic talks, talks about application (how to use herbs and make products), talks on the business side of herbalism, either as a producer or a clinician, and OF COURSE the VBMA track. I heard so many great talks! There was one gentleman, Chris Kilham, who travels the world helping locals set up businesses harvesting and selling medicinal herbs. I went to his talks twice: once about Morocco and once about the Silk Road. He was fascinating and his pictures even better.

We are so honored and fortunate as the VBMA that Rosemary Gladstar has asked us to participate in this auspicious event. It is a privilege and a responsibility to produce speakers appropriate of the event. This year, we had Drs. Cindy Lankenau, Barbara Fougere, Jordan Kocen and Rona Sheberin. Each one provided their own unique perspective on a subject. Barbara spoke about: (1) Getting Back to our Roots with Simples; (2) Grow your own Medicinal Mushrooms; (3) Essential Oils in Veterinary Medicine. Jordan spoke about: (1) Chinese Herbal Formulas for Liver Imbalances in Dogs; (2) Integration of Chinese Herbal Medicine and Conventional Therapy in Companion Animals; (3) Case Evaluation and Chinese Herbal Medicine in Small Animals. Cindy spoke about: (1) Equine Self Treatment of Lyme Disease; (2) Difficult Respiratory Cases in Equine and Bovine. Lastly, Rona spoke about: (1) Introduction to Phytopharmacology for the Clinician; (2) Phytopharmacology for the Clinician part II: Sterols and Sterolins and Polysaccharides and Tannins.

All these wonderful talks are set at Wheaton College, just outside of Boston, MA. Wheaton is a traditional small liberal arts college, so the facilities are dorms and classrooms. I find it fun to be back in that environment! Plus, being in New England, even if the days are hot, the nights are temperate, and you are more likely to be chilly than hot. It is usually lovely weather. Mother Nature tends to smile on these events. Then there is the food! Rosemary brings in an organic farm to table chef. The food is delicious, plentiful and healthy. All this is included in the event. The other advantage to the insulated location is that it is safe and family-friendly. Both Rona and I brought our children, and Cindy has brought her daughter in the past. I saw another veterinarian who brought her mother. It is just a bonus to be able to share our work and passion with our families in a way that they enjoy. Rona's and my boys are old enough to go to talks, but there is even a kid's camp for the little ones, complete with herbal activities.

The only issue with children is that they all want to stay for the fun singing and dancing at night, but it is always very late. When breakfast is at 8 am, it is hard to stay up for the evening activities. There is so much crammed into a short 2 ½ days, that they burn both ends of the candle as it were. This is okay if you are an adult, but plan on sleeping when you get home!

Like all conferences, there are vendors at IHS. Zack Woods Herb Farm brings lots of medicinal plants for sale, but if you want plants, get there early or they will be gone! There are clothes and jewelry and lots of homemade herbal products. There is also information on teachers as well as their books and courses for sale. The vendor room is not to be missed. Plus it is a great place to stock up on gifts for loved ones. The best part of IHS is that you get to participate in all the awesome stuff I've talked about, AND the profits go to United Plant Savers. This year, the donation was almost \$18,000! Think about all the good UPS can do with that money. (If you are not a member of UPS< check them out – I call it the "World Wildlife Fund of plants.)

Now that you know how great IHS is, you have to wait until 2017 to go...but don't worry, we will remind you in plenty of time. In the interim, please enjoy the moments I was able to capture with my camera!



Cindy's Yummy Herbal Beverages

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

Recipes in the JVBMA normally focus on our four-legged friends and clients, but we all would all do well to remember that sometimes pet caregivers need tasty treats, too. These drinks will put a smile on your face any time of the year.

Hibiscus Punch

First, we will make some hibiscus concentrate.

- Buy one ounce of hibiscus.
- Put the whole ounce in a quart canning jar.

Optional: Add one scant teaspoonful of dried mint leaves to the jar.

- Fill the jar to the top with boiling water.
- Put the two-part canning lid on the jar.
- Allow this brew to steep for at least four hours. I often make it at night and serve the next day.

To serve, dilute the concentrate with cold water. I add about three quarts cold water and lots of ice to one quart of hibiscus concentrate.

Optional: Add sweetener of your choice before serving.

Unlike other infusions, this one will stay good in the refrigerator for up to a week.



Violet Lemonade

Ingredients

- 16 ounces violet leaves and flower tea
- 1 cup raw honey
- 1 cup lemon juice (organic, if possible)
- Water

Directions

First, steep some violet leaf tea. After straining the leaves out, pour into a 2 quart pitcher and mix in 1 cup of raw, local honey. Raw honey contains antioxidants, vitamins and minerals, and it has anti-inflammatory properties so using it to sweeten your lemonade will add many more health benefits to the finished drink. Whenever possible, purchase honey from a local beekeeper who limits the use of chemicals in the hives.

Next, add 1 cup of lemon juice - freshly squeezed if possible, but bottled will work fine too. Lemon juice supports the immune system and acts as a blood purifier. If you have access to wild dewberries or blackberries, a handful of those can be added to the drink as well!

Finally, add enough water to fill the pitcher. Pour over ice, garnish with a violet blossom or lemon slice, and serve. This recipe can be adapted for different herbs as well, so as the weather warms up, we can enjoy a variety of herbal lemonades all summer long!



Recipe for Hip Dysplasia Food

by Constance DiNatale, DVM, Winter Park, FL

I think connective tissue is sorely missing in animal diets, as well as our own. In food therapy class we make hoof soup, which I can tell you from personal experience can work magic. I lost all the cartilage in my left thumb joint and medial index finger about 9 years ago after a nasty cat bite in the joint went bad. It took 4 months for Shaolin Deng to get the infection out, then a surgeon went in and freed up all the adhered nerves and took out all the rotten cartilage. He said he took it all. I lost all the muscle mass of the thumb and the joint had just one big click when I tried to move it, really sickening bone on bone click. A few days after the surgery we were teaching at NAVC and Xuisheng Xie took us out to dinner and ordered us tendon soup. After the first few sips, I almost stuffed my head into the bowl. I had 3 huge bowl fulls and literally had no pain that night for the first time since the cat first bit me. I got a recipe from Xie's wife and ate it non-stop for months. I popped a few Adequans as well, and I can say that was helpful too but hurts like hell. I have a joint that glides nice now, and the whole thing still excites me.

Here's one recipe:

Get 3-4 pounds of hooves and/or tendons. Usually you can find the flexor tendons plus the inner parts of hooves. Lamb and goats are superior because they are the best climbers, then cows, and last pigs (the most sedentary), and I have had hunter friends make it from deer and elk. Put them in a big pot or a pressure cooker (I never tried this but Xie's wife Yanru has made it this way) and cover with water, and bring to a boil. Let it boil a few minutes and remove all the scum that rises to the top. If you add the spices right away, you can't get the scum out without removing spices as well. Add garlic, some ginger, and a bunch of tamari sauce. Every culture I asked about tendon soup uses some large amount of a salt source, except at one middle Eastern shop where they use a form of beet molasses. Yanru says the tamari helps keep the color of the tendons but I suspect that either salt or sugar will help soften the connective tissue. In class we add a cinnamon stick, a few star anise, 2 cloves, some Szechuan pepper, and some fennel seed. To cheat, just add some Chinese 5 spice but the real spices are better. Plus they help a bit in masking the barny odor that may permeate the house-oops, did I mention the smell?

The spices and pungents help the stomach digest the heavy richness of this dish. Cook for many hours until the tendons have fallen off the bones. Discard any bones as they are sharp and dangerous, and feed the broth and tendons. It cools into gelatin. It is hard on the Spleen so is not a great food for a hot wet summer. It is a QI and Blood tonic, and can break you into a sweat if you eat enough. The spices also make it a Yang tonic and they move Stagnation. It is easily frozen and can be dolloped out by the 1/2 tablespoon for little dogs and cats up to 1/3-1/2 cup daily for big guys, though less is fine, and start very low for animals with weak GI. Goat is the easiest on the stomach usually. I never feed it in large amounts all the time. It proved a great way for my client with 14 Malinois' to provide connective tissue on a herd basis. I have bought hooves in Halal markets, West Indies markets, hispanic, Chinese, Vietnamese, Indian, Pakistani, everywhere except the regular grocery. It leads to great conversations as everyone wants to know why I am getting hooves. I have a lot of hoof recipes!

Another option is to just add a piece of hoof/tendon to a pot of whatever else is cooking and leach the essence into the whole dish. Anyone who loves osso bucco or oxtail soup knows the effect of this.

Carvel always taught us Vitamin C at 45mg per kg BID for bad hips, and alfalfa, as Ihor suggested, and I usually put every fast growing long legged hip dysplastic prone pup that comes into my clinic on Calcium ascorbate, 50-100mg BID at 9 or 10 weeks, 200-250 BID third month, 400 to 500 from 6 months to 9 months, etc, though I don't usually get up to the big doses as often as I used to. As adults, Carvel said Sodium ascorbate for maintenance. And I also agree that hard ball playing is a disaster for growing pups.

Bon appetit!

Make some hoof soup and report back how much you love it!

Pet Food Due Dillgence

by Terri Symonds Grow, PetSage, Inc., Alexandria, VA

For herbalists, foods as extensions to herbal therapies can offer more in-depth and encompassing treatments. Yet with burgeoning changes in the pet food industry, an out-of-date food reference can put you on a path to frustration and your patient at risk. Brands once steadfast are now mass merchandised, dramatic packaging changes cover formula modifications, and ingredient sourcing goes to the highest bidder—all directly affecting your patient and easily discounted if not openly addressed.

What an animal is fed is the greatest factor in its health & life expectancy with foods and diets playing a major role in the cause and development of disease and behavior disorders. For herbalists, foods as extensions to herbal therapies can offer more in-depth and encompassing treatments. Yet all too often, diets are overlooked in the rush to appease a client, limiting improvements from therapies when diet is not addressed.

When your client walks in the exam room are you prepared to discuss the food they listed on their patient forms? With burgeoning changes in the pet food industry, an out-of-date food reference can put you on a path to frustration and your patient at risk. Brands once steadfast are now mass merchandised, dramatic packaging changes cover formula modifications, and ingredient sourcing goes to the highest bidder—all directly affecting your patient and easily discounted if not openly addressed.

Pet owners place blind faith in brands they've purchased consistently or ones recommended by trusted friends or their health care provider. But buying pet food today takes more than reading the descending order of ingredients. It requires an understanding of labelese, some animal nutrition knowledge, a little arithmetic, some detective work, and a leap of faith.

The growth of the pet industry has set impressive trends, topping \$53 billion in 2012—even through recession cut-backs. Pet foods are the largest segment of the pet industry accounting for \$20.64 billion in revenue and 1.5 times the revenues of veterinary products and services. There are hundreds of pet food brands and thousands of formulations currently available—from budget to certified organic and from established to entry manufacturers.

Client demand has made health and longevity products a top growing category(i), yet to date, the pivotal component of health and wellness, diet, is often discounted in the exam room. But know pet food manufacturers haven't missed a beat. Fifteen years ago when glucosamine was first being recommended for joint health, savvy pet food manufacturers started promoting the added supplement in their food lines. All but for one diet, the volume wasn't near a therapeutic level, yet that one ingredient became a sales tool as well as a potential trigger for food intolerances. Since then specialty diets, superfoods, novel ingredients and glossy packaging are selling foods, not nutrition.

Clients are sold the convenience and simplicity of a "complete and balanced" diet, through advertising that glamorizes the many health solutions contained in each package. Ask a client to look beyond the hype and pretty packaging and they are at a loss. Do they understand that a grain-free simply means the grain has been replaced by another carbohydrate such as potato—not offering the high meat profile they envision? Or the heavily sprayed flavoring is what attracts the pet, not the tastes of the "spectacular" ingredient panel? Do they understand a "Made in the USA" label may conceal sourcing from outside the USA? Are they aware dry food does have an expiration date, especially if stored incorrectly? Or do they know their "reliable" brand was just sold to meet stockholder demands and what this historically implies?

What's This Have to Do with the Vomiting Dog or Cat in Your Exam Room?

Our pet food industry is promoted as the most highly regulated of all food products—with the possible exception of infant formula—through multi-layer regulations of the [Food and Drug Administration](#) (FDA), state feed laws and the

regulations developed by the [Association of American Feed Control Officials](#) (AAFCO), the [Federal Trade Commission](#) (FTC) and the [U.S. Department of Agriculture](#) (USDA)(ii). The public is advised pet food companies require exacting specifications and work closely with their suppliers to make sure they receive only the specified ingredients. Yet, there is a wide latitude between manufacturers and production.

There are three basic formats of cooked pet foods: baked, canned and extruded, which are produced primarily two ways. Manufacturers produce their own line and/or they co-pack lines for pet food companies with contracted specifications and manufacturing guidelines. Formulas can be fixed or open label—allowing variations in the ingredient panel. Add sourcing fluctuations, cooking and temperature deviations, plant or equipment changes and a wide range of palatability and digestibility issues surface.

For example, owners are taught to look at the first ingredients for the better meat protein profile, yet nothing is mentioned about meal grade variability. While considered controversial, meat meals can offer higher meat protein profile foods, but little is publicized on the types, grades and nutrient composition of meals. Manufacturers are not required to specify the grade used and can replace as long as the manufacturer can control this formula variation and manage a consistent finished product(iii)—creating a challenge for discerning digestive, urinary and immune systems. Under AAFCO regulations, manufacturers have six months to update the food label if a formula was changed, which can be repeated indefinitely.

While the Pet Food Recall of 2007 heightened manufacturing and ingredient awareness in the years since, less conspicuous case reporting went unnoticed. After a highly recognized high protein, low carbohydrate brand was sold, six months later health issues from vomiting and diarrhea, to urinary disorders began to be reported by loyal users. Followed by another national brand, that only admitted formula changes when similar reports began to emerge but discarded implications. Most recently, glamorous packaging enwrapped extensive formula and guaranteed analysis changes that went unnoticed until health issues surfaced including dramatic weight loss and seizures.

No, this data is not from evidence-based trials, but from case after case who've shown up on the doorsteps of holistic veterinarians and more so at the counter of informed pet stores. Clients weary from the numerous rounds of antibiotics, steroids and dewormers seeking options for their animals that are not much improved following treatment.

Help Your Client Avoid Pet Food Pitfalls

Spending in the pet industry is at an all time high and growth is expected to continue due to increased multiple pet households, consumers without children, and owners investing in medications and supplements for health and longevity(iv). This translates into more pet food brands, consolidations, mergers, acquisitions and new market opportunities—even more pet product companies investing heavily to reach and influence your client.

Today's pet owners seek information and appreciate information destination resources(v). Use this need to know to help your client become their pet's health care advocate. Create an up-to-date reference on foods and manufacturers so your clients have support making a better decision on this critical element of health and well-being. Learn more about your client needs and their purchasing decisions. Develop strategies to help shape purchases, help you help client care compliance, reduce your frustrations, and help your client's companion to a healthy well-being.

- 1. Determine the current food.** This includes brand, formula and style meaning canned, dry or raw. Is it a newly opened bag or one that's been open for months? Is there another new food or treat that's been added? If this is a new pet or new pet owner, be sure to discuss serving sizes. Overfeeding is a common cause of digestive distress.
- 2. Keep records.** Not only in the patient's records, but a separate account. Designate a staff member or two to chart each patient's diet, any adverse reports, weight, skin, and any possible pertinent info that may help show ingredient or brand trend.
- 3. Discuss commercial food limitations and options.** Help your client understand there is a difference with commercial foods—you really do get what you pay for. Explain the potential for batch and formula variations that can affect their pet, beginning with manufacturer sourcing to change of production plant. Encourage a rotation of brands and proteins when possible to help develop more long term nutritional balance. Even encourage some homemade, if the client shares an interest in better ingredient control and cooking.
- 4. Review food and storage safety.** While larger packages can be more economical, ingredients, especially in "natural" foods, can be fragile and should be used within a safe timeframe and stored properly. Dry foods should

be used within 30 days and stored in a cool area, even refrigerated in hotter weather. The fats used on the dry foods can become rancid quickly. When a pet food container is used, recommend placing the filled bag inside the container or encourage it being scrubbed before new food is added.

- 5. Network with pet stores.** Valued pet stores offer knowledgeable staff members who are trained to listen for emerging issues. These stores are also required to be abreast of the latest trends in the industry, from acquisition to manufacturing changes. More importantly, your yearly client may be their regular client. Enlist staff and offer guidance of what information you would like to be made aware of on foods and industry trends.

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TERRI GROW

Terri Grow is the founder and president of PetSage, Inc. Since 1995, PetSage has offered the finest array of holistic pet products, selecting lines and products based on quality controls, sourcing, and traceability.

PetSage works closely with clients and their veterinarian to carefully integrate holistic therapies creating a unified health care team, whether this involves a step-by-step health care plan or individualizing a pet's nutritional and holistic therapies.

Terri brings a distinctive combination of experience, knowledge and advocacy to companion animal health and wellness. Since founding PetSage 19 years ago, she has worked with veterinarians, pet guardians, trainers, shelters and manufacturers on canine and feline diets, herbal therapies and nutritional supplements forging a unique expertise in the pet industry.

Terri often writes and speaks on holistic pet health and well-being. She is certified in Traditional Chinese Herbology with advanced studies in animal nutrition and complementary therapies for behavioral and chronic health issues. Terri is an affiliate member of the American Holistic Veterinary Medical Association, the Veterinary Botanical Medical Association, and the National Animal Supplement Council.

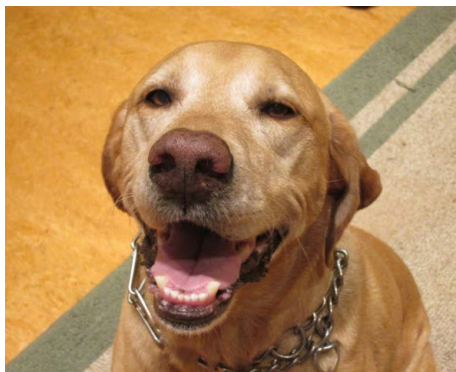
CASE REPORT: CANINE

The Treatment of Secondary Infections Using Herbal Medicine

by Donna Kelleher, DVM

A comparison of two skin cases: one excess and one deficient, both showing the importance of addressing secondary infections when treating allergies holistically. Both cases show the importance of engaging the adrenals and microflora and balancing the yin/yang.

Case One: Ben



Ben is a four year old Labrador mix with a history of itchy skin in the summer, especially after swimming. His skin shows signs of Staph infection or small red circles under belly and inuinal areas. He rubs his belly in the grass but his person complains most about him chewing between his toes and his chronic ear infections. Upon examination of his ears, it appears yeast is the main issue with dark, sweet smelling discharge. Between his toes, there is swelling, redness and black colored edges, indicating the probability of multiple secondary infections with bacteria and yeast. His pulses are wiry, tongue is red and his personality as well is excess. He is drinking more water. Ben responded quickly to a powdered combination of Chaparal (unbelievable for fungal infecitons, some toxicity so you should dilute it with other herbs), Oregon grape root (cooling, berberine-containing, liver strength), Yellow dock (alterative) Foti (yin strengthen), Gotu kola (immune, liver, great for skin lesions), Equisetum (engage the elimination through the kidneys) and diet changes with probiotics to preserve the balance. For when Ben swims, I prescribed a shampoo rich in essential oils to help fight the infection topically (AromaDog "healthy shin shampoo").

The skin is an amazing balance act of nature. Somehow, more often than not, several species of bacteria and yeast as well as mites cohabitate and keep one another from overpopulating to cause lesions. I have been studying this balance for some time and believe no two animals strikes the same flora. Whether it is through specific shampoos, topical treatments, dietary changes or the nurturing of commensal bacteria, holistic veterinary medicine really shines when treating skin conditions. The reason for this is simple. In holistic medicine, we foster a caretaking role with regard to the immune system. Instead of establishing an attitude of killing some bacteria or yeast, leaving gaps for others to take hold, a holistic approach is to present group therapy for all organisms. For example, one approach to treating a Staphylococcus infection, instead of administering antibiotics, might be to build up intestinal "good" bacteria and that will in turn affect the skin bacteria.

Since 70% of the immune system is governed by digestion and tonifying the effect good bacteria has on the Peyer's Patches or large amount of lymph tissue along the intestinal tract. Many times, when there is a flora problem at the skin level, there are food allergies driving that imbalance. Using NAET, I like to identify each allergy and either treat it or come up with a game plan to avoid that allergen. It is important to note, blood tests for food allergies are not helpful. One thing I like about NAET is it can reflect a dynamic, ever-changing process. If your dog has a turkey allergy and you feed everything but turkey, eventually he might change the protein he is allergic to based on what he is being fed at that time. This phenomenon I call rotating protein allergies. Blood testing for allergies does not take into consideration the dynamic aspect of the condition, nor is it repeatable or scientifically reliable, but it costly and people therefore think it is viable.

Secondary Infections:

How does an underlying food or environmental allergy contribute to a skin bacteria or yeast problem? In other words, how do we get a secondary infection on top of a primary allergy? In essence, the heat and inflammation created in the skin creates a petri dish, a nice environment for certain pathologic bacteria and yeast to grow in patches in the skin. How can we tell if the problem is more an infection versus an allergy? Sometimes it's hard to tell but what I

look for are specific tell tale skin lesions. A Staph infection will usually be a red circular pustule giving way to a slightly peeled edge where the infection is in the process of spreading. The key here is red and circular. Ringworm can look like this too but generally is easy to diagnose either off a skin culture or using a Wood's lamp to highlight the fungus that causes roundworm. Both are slightly itchy. Ringworm is more common in young animals especially when there is a history of contact with young kittens. Ringworm often affects the face, head and upper part of the body whereas Staph infections commonly occur between the back legs and under the belly.

The last common type of skin infection is yeast but it can be the most difficult to treat. I usually look for redness or flaking of the skin in the ears, under the armpits or inguinal creases, and in moist ravine-like areas of the body. The key is there is often black color at the edges of the lesions. If there is yeast, I generally treat that first at the same time I am clearing the food or environmental allergies using NAET and acupuncture. Bathing or soaking can be helpful in some cases but in others the moisture only propogates the problem. So if you have a dog that grows yeast between the toes and under the paws, you may soak his feet in Epsom salts to draw out the inflammation, but if there is yeast you might find 2 drops of tea tree oil and 2 tbsp of witch hazel may be more effective as well as a little apple cidar vinegar in the food or water. In other cases we need to keep everything dry and use Pellitol, a very drying, anti inflammatory combination of juniper tar, Resourcinol and Calamine lotion that can be extremely effective to kill yeast and prevent the moisture required for it to thrive. The ketoconazole conventional veterinarians use is highly toxic and often the yeast becomes resitant to it. In my practice, it is not uncommon for dogs to be taking ketoconazole for years.

Case Two: Tori



Tori is an eight year old black Labrador with a long history of skin allergies, secondary yeast infection managed for five years with daily ketoconazole, Atopica, occasional Prednisone and weekly hyposensitization injections through the recommendations of two separate dermatologists. Every night after eating the dog "bloating" but previously had gastropexy surgery for a case of severe bloat and GDV. Despite seeing multiple veterinarians including CSU vet school. Pulses: deficient, weak superficially and Tori is cold at night. I assumed the chronic ketoconazole had caused a deficiency to all yin organs. Knowing that the secondary infection may creep back, I used my favorite yeast killing herbal combination: Chaparral and Oregon grape root with yin strengthening herbs Foti, Gotu kola, nettle leaf, yarrow, yellow dock. The daily bloating and gas immediately ceased after discontinuation of ketoconazole and a carminative tea (dill infusion) as needed. NAET also pointed to her food allergies and every two weeks she was treated for them. Here is the list of what she was allergic to: egg (common with many vaccinations), salt, grains, yeast, essential amino acids, turkey, beef, pork, grass, mold, and pollen.

I've found that many of these severe food allergy dogs have an ADHD condition as well as anxiety, so I also made up an anxiety tincture to use as needed:

- California Poppy
- Wild Lettuce
- Skullcap
- Passion Flower

The ratio should be about 50% poppy with the other components divided into in equal amounts.

After four NAET treatments (NAET included acupuncture on LI 11, HT 7, LI 4, LIV 3 and SP 6) Tori stopped experiencing nightly bloating and then just had gas. After the essential amino acid clearing, we then needed to do a non-essential amino acid clearing. This is a reminder that allergies change in a dynamic process. We did every three weeks novel proteins and after six months Tori had returned to normal. All of her medications were discontinued, with the exception of the anxiety tincture and the Chaparral mix, both to be administered as needed.

CASE REPORT: EQUINE

The Treatment of Nonulcerative Keratitis/Keratouveitis in an Equine with Western Herbs

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

Abstract

An equine, who had suffered from Nonulcerative Keratitis/Keratouveitis with no relief from conventional therapy for over two years, with disease progression into a keratouveitis was symptom free after two months of an internal western herbal formula.

Case report/Signalment:

Claire is a 15 year old, 1200 pound Saddlebred mare.

Pertinent history:

Claire has been shunted from training stable to training stable for the past 7 years. She was purchased by her current owner in the fall of 2011. Her past history stated that she had 'occasional eye issues'. With her current owner, since the spring of 2012, she had suffered from a keratitis, characterized by non-ulcerative corneal edema; with slight blepharospasm, conjunctival hyperemia and chemosis primarily in her left eye. It was worst in from spring to fall, slightly improving in the winter. During this time, she had been treated with many various ophthalmic ointments, including a triple antibiotic and atropine, neomycin based ointments, triple antibiotics with steroids. She would respond while the ointments were used, only to regression as soon as they were discontinued. Starting in 2014, her right eye was also affected and she developed a severe epiphora with severe blepharospasm in both eyes. She was treated with systemic antibiotic, (SMZs), and non-steroidal anti-inflammatory product, phenylbutanone, with minimal relief. On May 12, 2014, she was been started on systemic Dexamethazone and developed a significant digital pulse in her front feet. With the threat of laminitis, her owner sought an alternative form of treatment.

Clinical signs and Physical exam findings: On May 15, 2014

Both of Claire's eyes were affected. Her left eye was held closed with a large amount of 'hot' clear tears on her face. Her right eye was only slightly closed. Both conjunctivas were red and swollen; her left eye had very engorged prominent dark conjunctival blood vessels. Her right scleral vessels were red and engorged; both corneas was edematous and opaque with deep stromal vascularization from the limbus, in her left eye, perivascular epithelial edema was extensive with dense mid to deep stromal edema, and cell infiltrate (endothelitis). There was slight corneal pigmentation in the ventral medial corner of her left eye. Her right eye was similarly affected but to a much lesser degrees. In her left eye, in the ventral-medial aspect, there was an area of dense corneal opacities. The ventral anterior chamber fluid appeared more viscous than normal in the right eye; hypopyon was evident. She was very resentful of any attempt to examine her eyes. It seemed to cause significant pain and discomfort. Claire also had a very stiff way of moving; she had restrictions in the lateral flexibility of her lumbar vertebrae with no flexibility in the Lumbar-sacral joint. She had severe muscular spasms in the dorsal lumbar back muscles. Mentally, she is a very nervous and agitated horse, very restless. Her tongue is muddy red and swollen, her pulse is deep and fast. She had hair loss over her facial region.

Laboratory test: Original veterinarian had corneal swab cytology-no fungal agents identified, no significant organisms were identified.

Western Diagnosis: Solely on physical exam, her Western Diagnosis would be a form of progressive nonulcerative corneal inflammatory disease, collectively termed nonulcerative keratitis (NUK) and now progressing into a keratouveitis.

Etiology and Pathogenesis: The etiopathogenesis of NUK is thought to involve deviant or up-regulated immunoresponsiveness of the conventionally immunologically privileged cornea to locally presented heteroantigens or auto-an-

tigens. (Matthews, A., 2000; Gilger, R., 2009) Immune-mediated keratitis has been described in horses, both the USA and UK. (Matthews, A., 2000; Gilger, 2005) The term itself is used to generically identify a heterogeneous group of primary, nonulcerative, and noninfectious keratides of presumptively immunoinflammatory origin. Five distinct types of IMMK have been described in horses from the USA, including four of clinically similar types differentiated by their location in the cornea and the fifth type being Eosinophilic keratitis; and two in UK with some significant differences in clinical presentation. Researchers are not sure at this time whether that represents differences in etiopathogenesis or in patient population immune responsiveness. It does appear that the equine cornea is unique in its expression of putatively dysregulated immune responses potentially resulting in a wide range of IMMK. A diagnosis of IMMK is made if there is a progressive or chronic (>3 month in duration) nonulcerative persisting or recurring corneal opacity with mild to moderate signs of cellular infiltrate, corneal vascularization and corneal edema. The current difference with Claire is, IMMK is characterized by having only mild signs of ocular discomfort (i.e. only mild epiphora and/or slight blepharospasm) and a lack of secondary uveitis and clinical improvement with anti-inflammatory medications. Up until 2014, Claire fit the criteria for IMMK. In 2014, she was no longer responsive to anti-inflammatory medications and was showing significant signs of pain, epiphora and blepharospasm and was developing signs of uveitis; anterior chamber hypopyon. In these cases where there is both recurrence and refractoriness to conventional drug suppression, it may reflect long-term alteration in the cellular immune status of the anterior segment, including the acquisition of a permanent population of Major Histocompatibility complex II+ antigen presenting cells and dysregulation of the normal clonal population of regulatory T-cells. This reflects primary immunopathologies within the extracorneal ocular microenvironment, including the contiguous conjunctiva (epiphora), tear film ('hot' tears), and anterior chamber (hypopyon). The disruption of the cornea's immunoregulatory microenvironment is likely to have significant fallout for corneal health. A viral etiology is frequently cited, in particular EHV-2 or 5 and it is possible that viral epitopes may be retained within the cornea (rabies antigens are known to do this) and may be capable of acting as heteroantigens. Similarly it is possible that other microbial heteroantigens, including fungal elements and GMO particles, may act to trigger a low grade immunoinflammatory response in the basal epithelial layer. It is interesting that Claire historically had spring and fall aggravations which corresponded with both vaccinations with Equine Rhinopneumonitis, Rabies and Influenza with the timing of corn or soy pollination and when corn particles are aerosolized during harvest (GMO source). During chronic inflammation of the cornea from any source, there may be a general loss of immune tolerance, and in this environment upregulated and activated antigen presenting cells can effectively present antigen to the adaptive immune system. (Mo, JS, Wang W, Kaplan, HJ, 2007) In this immunologically reactive corneal microenvironment, cross-reaction between infectious agents and self-antigens can proceed to autoimmune disease. An underlying infectious agent, or like particle; vaccine antigen or GMO products, may thus be either the inciting or perpetuating cause. This agent may be directly inciting active inflammation or may have induced immunologic cross-reaction with self-antigen in the cornea. This immunologic cross-reaction with self-antigens has been well documented with leptospiral organisms or their DNA in the equine cornea.

Etiology and pathogenesis from a Western herbal perspective: "There are no specific diseases only specific disease conditions" (Florence Nightingale). Some pathogenic factor created the initial "invasion" on the corneal tissue. The inability of the treatment to expel the pathogenic factor lowered Claire's vital action creating stagnate and depressed tissue state; abnormal composition of the blood and lymph, and accumulation of morbid waste and toxins in the eye locally and body systemically. (It is interesting that according to Christopher Menzies-Trull, keratitis with spondylitis is associated with gonorrhoea, related to vaccinosis; syphilis, related to Lyme disease; or TB, relating to chronic rhino-influenza.)

Pertinent factors: Claire's stable is located next to several farms where significant amounts of GMO corn and soy are grown. The GMO pollen in the air in the spring and corn chaff is aerosolized in the fall. The stable also vaccinates at least twice a year against Equine influenza and Rhinopneumonitis; both organisms have been implicated in recurrent uveitis. They are vaccinated against Rabies yearly in the spring; rabies is known to be able to create corneal inclusion bodies. One final factor: the level of tick exposure has exponentially increased in recent years; exposing the horse to Tick-borne spirochetes. We have many suspected inciting causes.

Assessment of case: Claire initially suffered from an invasion of some type of pathogen. Now, she is suffering from a chronic active inflammatory disease involving not only the corneal tissue into her deeper eye but her entire body (low back rheumatism, spondylitis) and her mind. The chronic use of antibiotic and steroidal ophthalmic ointments has perpetuated the chronic inflammation; ultimately overwhelming her ability to eliminate toxins creating stagnate tissue

state with accumulations of morbid products. Additionally, she has had several year of antibiotic usage both topically and systemically; steroids topically, and systemic non-steroidal anti-inflammatory drugs; these have been associated with creating "leaky gut" syndrome; creating additional toxic stress on her liver decreasing its ability to remove accumulated toxins.

Plan is to:

- To restore health and vitality; using alteratives; immunomodulating tonics, and blood tonic, nutritive tonic;
- To restore eliminatory organs: hepatorestoratives, lymphatics, cholereitics; chologogues;
- To relieve ocular symptoms: anti-inflammatory, anti-allergic, immunomodulating, anti-microbial; while moving the stagnate debris out of the eye; anticatarrhal astringent, with a membrane tonic;
- To help her mental state; sedative, anxiolytic herbal nervines;
- To ensure healthy GI tract; anti-ulcer, vulnerary; bitter tonics
- To help her muscular-skeletal pain: anti-inflammatory, antiarthritic, anti-rheumatoid; and analgesic effects are needed.

An herbal medicine approach was taken as conventional medicine had failed to relieve symptoms and allowed the disease to be pushed deeper into her body; there was no curative response from the conventional drug therapy. During the next phase of more aggressive drug therapy, Claire became too weakened from this therapy and was developing laminitis in her fore feet; a sign of endotoxin overload; secondary a leaky gut situation. Claire's owner had no choice but to use a different approach. Herbal medicines have the ability to clear accumulated toxic wastes while strengthening organ function and modulating the immune system.

Herbal formula: Equal parts of Echinacea, *Echinacea angustifolia*; Chamomile, *Matricaria recutita*; Devil Claw tuber, *Harpagophytum procumbens*; Eyebright, *Euphrasia rostkoviana*; Nettle leaf, *Urtica urens*; Skullcap, *Scutellaria lateriflora* and Kutki root or *Picrorrhiza* root, *Neopicrorrhiza scrophulariiflora* were used in a 1:3 tincture; her dose was two tablespoons twice a day.

Echinacea root, *Echinacea angustifolia*, is always indicated when there is "bad blood" with the characteristic murky tongue. It is a cooling stimulant that is indicated whenever there is a high level of exhaustion, and dark veins Echinacea is an antimicrobial, anti-inflammatory, alternative immunoregulator and tonic herb known to be helpful in recurring infections, especially in weakened individuals. It is also a blood builder. It is an herb that is characteristic for a high level of exhaustion: overwork, long hours, when the veins are full and dark. The tongue was specific for the need of Echinacea. In Traditional Chinese Medicine (TCM), Echinacea can clear retained pathogens, tonify and regulate Defensive Qi (immune system), and clear Wind Heat, and Heat Toxins. It is hoped that Echinacea would be able to help clear the allergen while supporting Claire's immune system. The source used of Echinacea used is sustainable. Echinacea theoretically could counteract immune suppressive drugs. Claire is drug free; so no potential herb-drug interactions. Research has shown Echinacea to activate macrophages and natural killer cells. It inhibits both COX-1 and COX-2. Its echinacosides are anti-inflammatory, vulnerary, antioxidant, hepatoprotective and neuroprotective; its Polysaccharides are antiviral and immunomodulatory, its Alkamides are antibacterial, antifungal, immunodulatory and anti-inflammatory. (Ross, 2010)

Chamomile flowers, *Matricaria recutita*, is an anti-inflammatory, anti-allergy (flavonoids and monoterpenoid), antispasmodic (apigenin) herb with a mild sedative anxiolytic, activity. It has a bitter tonic healing, anti-ulcer effect. Historically, Chamomile was used as a nervine for tension headaches. Here it was used to decrease the inflammatory reaction and reduce the irritation in the eye and back and soothe the nervous system with its tranquilizing effect. It clears pathogens from the Liver with its cholereitic influence. It also has indications in healing intestinal 'leaky gut'. Chamomile is a uterine stimulant; but since Claire is not pregnant, there is no contraindication. It treats stagnant tissues. According to Peter Holmes, conditions requiring Chamomile are characterized by inflammation, irritation and discharge; oversensitivity, weakness and pain on the nerve level; and tension, restlessness, and agitation on the emotional level. (Holmes, 1986) Research has shown its significant antioxidant capacity and its ability to inhibit the production of prostaglandins and leukotrienes.

Devil Claw tuber, *Harpagophytum procumbens*, is an antimicrobial, anti-inflammatory chologogue with strong analgesic, antirheumatic effects. It is well indicated for neuralgias. Devil's Claw is an antiarthritic herb which will be

helpful in treating Claire's spondylitis/rheumatism in her low back. It is popularly used in Europe for the combination of digestive, hepatobiliary; arthritis, and allergic complaints. Its anti-inflammatory effects are linked to the ratios of harpagoside (a iridoid glycoside), harpagophytum, and verbascoside (phenolic glycoside) as a COX-2 inhibitor. Devils Claw is a cleanser and detoxifier of the lymph and blood; it stimulates the lymphatic system. (Menzies-Tull, 2003) This is a threatened species; the source used can verify it is sustainable. It is listed as being contraindicated for gastric ulcers, but there are no reported adverse reactions; nor any adverse drug interactions. Research has shown that its antioxidant effects may contribute to the anti-inflammatory and analgesic properties.

Eyebright herb, *Euphrasia rostkoviana*, is an anti-inflammatory, antimicrobial tonic astringent which clears Wind Heat, that is, it can help remove the allergenic/microbial material that has caused the allergic/immune mediated ophthalmic conditions. It is a mucus membrane tonic and hepatoprotective. It historically has been used to treat allergic ophthalmia, acute redness, soreness, itching or pain of the eyes; discharge from the eyes due to inflammation, infection or atonic mucous membranes. This herb was selected due to its strong indications for the primary symptom of immune-mediated keratitis. In TCM, it clears wind and strengthens the eye; the kidney opens to the eye, and Eyebright relieves Kidney Qi stagnation, softens accumulations and antidotes poisons. The herb is also considered endangered, a sustainable source was used. There are no contraindications. Aucubigenin, the aglycone of aucubin, demonstrates antibacterial, antitumor, antispasmodic and antifungal activity. It has been shown to have effect against *Mycobacterium phlei*. (Homeopathic theory considered keratitis or keratouveitis to be in either a tubercular or syphilitic miasm.)

Nettle leaf, *Urtica urens*, is an antiallergenic anti-inflammatory, anticatarrhal astringent herb with uses in acute allergic conditions; it has traditionally been used for allergic conditions. It is anti-inflammatory in cases of arthritis, or rheumatism. Nettle was used in the formula to reinforce the need for anti-allergy type herbs. Nettle is known for its nutritive effects and it is used as a blood tonic; it promotes hair growth. Claire has been through a great deal in the past years; its nutritive influence was needed to help restore her to a better level of health and vitality. Its anti-inflammatory effects have been linked to caffeoylmalic acid. Culpeper said that it consumes the phlegmatic superfluities in the body that the coldness and moistness of winter had left behind (Culpeper, digital edition); this herb improves tissue states of depression and stagnation. There are no adverse effects reported with this herb, it is very safe. It helps with the removal of proteinaceous waste products from the system. It reduces allergic reaction to proteins. (Wood, 2008)

Skullcap, *Scutellaria lateriflora*, is a tonic, anodyne, nervine and tranquilizer with a hypotensive and antispasmodic, anti-inflammatory, astringent, febrifuge effect. In TCM, it can calm the Heart Spirit and calm Liver Wind; this means that it will calm Claire's agitated mental state. (Liver also enters the eye in TCM). Skullcap treats Kidney stagnation. It has traditional use with restlessness, spasm, neuralgia, tics, tremors, irritability, restlessness, and nervous headaches. It is a restorative after fever or influenza when the nervous system and circulation has been left 'out of order'. This is a "never well since" situation. Michael Moore stated that Skullcap is "a sure treatment for almost any nervous malfunction." It is specific for aching eyes with a dull headache and poor attention. Skullcap has no contraindications for Claire. Interesting that it was originally used in American Folk Medicine as a simple for Rabies and it is known that Rabies can cause corneal inclusion bodies. Research has shown that it is active against various oxidative stresses associated with mental disorders and is a strong anxiolytic as it binds to the benzodiazepine site of GABA-A. Kutki root or Picrorrhiza root, *Neopicrorrhiza scrophulariiflora*, is powerful hepatoprotective agent, a choloretic which has antioxidant, antiviral, anti-inflammatory, antiperiodic, anti-allergy and immunoregulator effects. It is effective for hyperimmune conditions such as allergies as it modulates the immune system. Picrorrhiza was included to ensure Claire's liver was returned to a vibrant functioning organ; it will help hepatic regeneration. It is active against *Leishmania donovani*; an organism known to cause keratouveitis. There are no reported contraindications or interactions. It is an endangered herb and to be used sustainably. Research has shown it to be a 'biological response modifier'.

Other Advice: As there are implications of either a vaccine or GMO aggravation; it was recommended to avoid any future vaccination; and to minimize GMO grains; to start on a mixture of oats, barley, rice bran, sunflower seeds with a vitamin-mineral supplement called "Just add Oats" which is high in Vitamin A, D, B's with Organic Selenium, Zinc. It was advised to make sure a Fly Mask was used all the time when outside, and to make sure she was in a stall away from the corn and soy fields. Fans that drew air out of the stall were installed to remove potential external environmental irritants.

Prognosis:

Despite the chronic nature, and deepening symptoms, Claire has a strong character. This case has clear indications of perpetuating factors. We had a hopeful prognosis. It was hoped that her innate vitality would prevail over the inciting factors.

Reassessment:

June 16, 2014: Her attitude is calmer, her back is not sore, she can hold her eyes fully open, no conjunctival swelling or redness; no engorged vessels; both corneas are clear, except still slight vascularization in the left eye, with some perivascular edema. Her right eye is normal. Plan: continue

July 20, 2014: She is calm, moving well, eyes are normal. Plan: slowly decrease the herb to one tablespoon per day; then to slowly discontinue.

November 16, 2014: Claire's eyes were tearing slightly after the corn was harvested. She was re-started on her formula.

December 17, 2014: Claire's eyes are normal. Herbal formula is stopped. Plan: to have a serious discussion on vaccinations before "Spring Shots".

Conclusion:

The herbal formula of Echinacea, *Echinacea angustifolia*; Chamomile, *Matricaria recutita*; Devil Claw tuber, *Harpagophytum procumbens*; Eyebright herb, *Euphrasia rostkoviana*; Nettle leaf, *Urtica urens*; Skullcap aerial parts, *Scutellaria lateriflora* and Kutki root or *Picrorrhiza* root, *Neopicrorrhiza scrophulariiflora* was not only effective in providing relief from her ocular symptoms and worked curatively decreasing her susceptibility to inciting factors but also cured her deeper mental and muscular symptoms. Claire's response should create the speculation that vaccinosis and/or GMO exposure can be the underlying etiologies of non-ulcerative immune-mediated keratitis and keratouveitis. The rise in immune-mediated diseases is a reflection of our environmental stresses and our husbandry practices. Conventional drug immunosuppression is not the solution in these types of cases. These cases need the multi-pronged therapeutic flexibility of herbal medicines where the toxic debris can be effectively cleared from the extracellular matrix while the immune system is supported and modulated, internal organ function is improved, eliminatory organs are strengthened while all mental and physical diseases are affected curatively.

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CASE REPORT: CANINE

Canine Distemper 'Resurgence'

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

Canine distemper is highly contagious viral disease of dogs and other members of the Canidae family; caused by a single-stranded RNA virus; a paramyxovirus. The disease has a worldwide occurrence and is often characterized by severe clinical disease. (Farrow, 1980) The initial infection is characterized by temperature elevation, transient anorexia, depression, and mild serous conjunctivitis. In dogs that fail to develop an adequate immune response, the virus can spread rapidly to the epithelial cells and the central nervous system. There is considerable evidence that Canine Distemper can cause immunosuppression. (Farrow, 1980) Due to the use of vaccination, over the past few decades, this disease has not been commonly seen in the general population.

Recently there has been a resurgence of this deadly disease concentrated in populations of shelter dogs. In general, these abandoned dogs are in a poor nutritional state when rescued. These dogs upon arrival into a rescue facility generally receive a full complement of vaccines with the intention to protect the animals from these diseases including Distemper/Hepatitis/Parainfluenza/Leptospirosis/Parvo and Rabies while also receiving topical flea products, oral wormers. Usually within a few days if intact, these animals are neutered.

Case:

'Bean' is a mastiff cross who was picked up as a stray on May 22, 2015. On May 29, she was vaccinated with a four way Leptospirosis vaccine, Parainfluenza/ Bordetella, Distemper/Hepatitis/Parvo/Parainfluenza and Rabies and was treated chemically for external parasites and internal parasites with pyrantel pamoate (Strongid). She additionally was surgically neutered with an ovario-hysterectomy and released for adoption on May 30. Her new owner noted immediately the presence of a moderately severe conjunctivitis. By the June 1, 2015, Bean had become very lethargic with a very poor appetite and was examined.

Signs and symptoms:

On June 1, 2015 Bean was found to have a significant conjunctivitis with a serous bilateral ocular discharge; she had a 105 degree F temperature. She had bilateral rales throughout her lung lobes, but with large areas in the ventral quadrates with no auscultable air flow, and felt to be areas of pulmonary consolidation; a mucoid nasal discharge with significant respiratory distress. She was extremely thin. From her physical exam, she was diagnosed with pneumonia and conjunctivitis, presumed to be caused by Canine Distemper.

Western diagnostics: Radiographs confirmed pneumonia

Treatment goals:

- To improve immune function to regain health and vitality: immunomodulating, adaptogens
- To improve respiratory function: antimicrobial, antiviral, antiseptic, expectorant, bronchodilant, antitarrhal, diuretic.
- To improve appetite and improve digestive functions: digestive bitters, Hepatotrophorestoratives

Herbal Prescription:

Equal parts of Echinacea, *Echinacea angustifolia*; Lomatium, *Lomatium dissectum*; Andrographis, *Andrographis paniculata*; St. John's Wort, *Hypericum perforatum*; Mullein leaf, *Verbascum thapsus*; and 1/4 Blood Root, *Sanguinaria canadensis* in a 1:3 tincture; 10 drops hourly for the initial doses

Echinacea, *Echinacea angustifolia*; Echinacea is an antimicrobial, anti-inflammatory, alternative immunoregulator and tonic herb with antitarrhal effects. It is considered by many to have adaptogenic qualities. Felter and Lloyd considered it to be an important herb in toxic states that have septicemia. Energetically it clears heat toxins that can cause septicemia. It has been proven to be effective in acute or chronic bacterial or viral respiratory conditions. Know-

ing that Distemper often creates neurologic symptoms, Professor Webster stated that Echinacea has action is slow forms of cerebromeningitis and that it acts as a stimulant to the capillary circulation and that no remedy is comparable with it. (Felter and Lloyd, 1983)

Mullein leaf, *Verbascum thapsus* is a relaxing expectorant, mild diuretic, mucilaginous. It is valuable for all lung problems because it nourishes as well as strengthens, it promotes expectoration and resolves viscous Lung phlegm and relieves coughing; it opens the chest and relieves wheezing, and can reduce allergy; it clears damp heat; and clears Fire toxins, removes lymph congestion,. (Holmes, 1994) It has been used to treat asthma, pleurisy, pneumonia, croup, tracheitis, emphysema, tuberculosis, contagious bronchitis. In deep respiratory cases, it helps remove the phlegm deep in the airways while reducing allergic reactions and allows the deeper airways to open. Mullein polyphenols play an important role in exerting the antioxidant effect; anti-inflammatory activity is correlated to iridoids and phenylethanoids.

Andrographis paniculata*, *Andrographis is an immunomodulation, antimicrobial, hepatoprotective, bitter tonic that has antibacterial, antipyretic, anti-inflammatory effects; antimalarial, with cardiovascular effects; antiplatelet and antithrombotic activity. It is hepatoprotective and an antihepatotoxin. It has a cholagogic, cholaretic effect that can help the liver produce and move more bile to assist in detoxification of the systemic inflammatory products. It traditionally is also used as a tonic and restorative in convalescence. Energetically it Clears Heat and Eliminates Toxins; and Dries up Damp which was a newer symptom. It is indicated in upper respiratory tract infections, Cough, sore throat; Liver disease. The herb is traditionally given as a restorative and tonic in convalescence giving non-specific immune stimulant, hepatoprotectant. Current research has seen it to be protective and preventative respiratory infections.

***Lomatium dissectum* *Lomatium*, *Biscuitroot*:** Lomatium is antiseptic, disinfectant, pectoral, salve, stomachic and tonic; antiviral, antimicrobial, immunostimulant, adaptogen. Lomatium first attracted the attention of the medical community when it was shown to be effected in treatment an influenza epidemic in the Great Basin area during the 1920's When influenza hit Nevada and New Mexico (1920-22) it wiped out whole villages of tough Shoshone and New Mexican mountain folks. After some experimenting, in Nevada and eastern Oregon, the herb of choice, from Oregon Trailers to Jack Mormons to Shoshone, was *Leptotaenia* Root (Now called *Lomatium dissectum*), and Great Basin pharmacies widely sold the tincture and Indians and settlers and ranchers and cowboys passed the dried root around. (Moore, 2003) It is a powerful antiviral/antibacterial agent, it is being used to reduce viral load in chronic conditions. It is an active pulmonary antiseptic. (Winston, 2009) This is an endangered herb. ONLY use this herb is harvested from a sustainable source.



St. John's Wort, *Hypericum perforatum*, (left, top) has been used traditionally as a pectoral (Levy, 1988), its use in respiratory catarrh (Grieve, 1971), and it has the ability to soothe irritated nerves with the recent research of its ability to kill paramyxoviruses such as the species responsible for Canine Distemper.



Bloodroot, *Sanguinaria canadensis* (left, bottom) was felt in this case, to be of critical importance due to the areas of consolidated pulmonary tissue. It is an expectorant, antispasmodic, cardiogenic, diuretic, sedative, anticatarrhal, circulatory stimulant, bitter hepatobiliary tonic, cholagogue. The specific indication is Hepatization of the lung (Ellington, 1919) while it promotes expectoration, resolves viscous phlegm, relieves coughing and will help to remove pulmonary accumulation. It has been traditionally used for convalescence from pneumonia with exhaustion and coughing; indicated in severe, chronic bronchial, hepatic conditions presenting as a deficiency, cold with phlegm and mucus discharges. The alkaloids, sanguinarine and chelerythrine, are felt to be bio-active. (Ross, 2010) Fyfe also states that often for coughs, "it is absolutely necessary to continue the drug for a considerable period of time. Dose is important, In minute doses we employ it in cases of cough with dryness of the throat and air passages, feeling of constriction in the chest, difficult and asthmatic breathing with sensation of pressure. In the same dose it is a stimulant to the vegetative system of nerves and under its use there is an improvement in the circulation, in nutrition and secretion." Research has shown Bloodroot extracts having potential as therapeutic immunomodulators, and has been shown to inhibit

platelet aggregation. No known drug interactions.

Advice given:

Follow up:

Started with Echinacea, Lomatium, Andrographis, St. John's Wort, Mullein leaf; equal parts with 1/4 part Blood Root. She is a mastiff cross; and had the owner give 10 drops hourly, to start; as she also was very anorexic and did not want to upset her stomach. Over the next three days, she started eating, temperature returned to normal; she was still breathing fast though but rales were decreased; but changed to 40 drops four times a day.

June 7, 2015: lungs sound normal-stopped the Blood root but maintained dose at 40 drops four times a day.

June 14, 2015: she seems OK, no neurological signs; but keeping her on St. John's Wort, Echinacea, Andrographis, and Mullein.

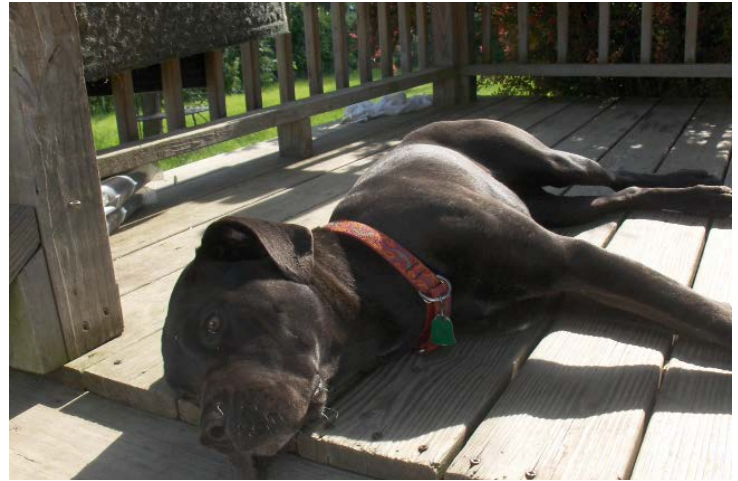
June 29, 2015: She is acting great, plan to slowly wean off her herbs

Reflections:

Canine Distemper is a highly fatal disease. Bean was critically ill and needed professional care. In her case, her veterinary herbal therapy was crucial to her safe and speedy recovery. There is no drug available with the anti-viral, adaptogenic, anticatarrhal, pulmonary circulatory normalizers, antimicrobial, antiseptic, expectorant, bronchodilant, anticatarrhal, diuretic; and digestive bitter effects that are present in this bouquet of herbal medicines. The question to be asked is whether the immunosuppression from her Distemper and Parvo vaccination while in a poor nutritional and stressed state was responsible for the manifestation of the active Canine Distemper?



June 7, 2015: note the emaciated condition of Bean; she often needed to stand in this posture in order to breathe.



June 20, 2015: Bean is now resting, she's comfortable and has had an appreciable weight gain.

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HERBAL MONOGRAPH: CANNABIS



COMMON NAME: Marijuana

LATIN NAME: *Cannabis sativa*

OTHER NAMES: Marijuana, hemp, ganja

Common Name: Cannabis	<i>Cannabis sativa</i> , Marijuana, hemp, ganja
Family	Cannabaceae (Nyssaceae)
Part Used	Female flowers and associated leaves; resin of female plants and seeds in TCM; (Water precipitates the active resinous principles. Lemon juice and other vegetable acids are the most efficient antidotes)
Active constituents	Over 750 secondary metabolites have been identified; Phenolic terpenoid- cannabinoid; Tetrahydrocannabinol THC; nitrogenous compounds; Flavonoids; Alkaloids; Volatile oils; resins
Actions	Intoxicant; Sedative; Analgesic; Anti-emetic; Appetite stimulant; anti-spasmodic; topically irritant action then a local anesthesia
Indications	Disordered mental action, disorders of motility, Pain, hyperaesthesia of the genito-urinary organs, urinary irritation, gravel, nephritis; restlessness of nervous exhaustion, melancholy, wakefulness of old age; neuralgia and hemicrania; sub-acute inflammation of the brain, in delirium tremens and in the hypochondria of the menopause; cerebral-spinal meningitis; epilepsy; hydrophobia; tinnitus aurium in minute doses; hip joint disease; Rheumatism, Asthma, bronchial coughs and laryngeal spasm, tickling coughs, whooping cough; Nausea caused by Chemotherapy, Lack of appetite, functional disorder of the stomach accompanied by pain; Lowers intra-ocular pressure in Glaucoma; soothing tonic to the uterine muscular structure, and in inertia and subinvolution it increases muscular power and energy and promotes contraction; menorrhagia and metrorrhagia; abnormal sexual appetite; hysteria; neuralgic dysmenorrhea; gonorrhoea, priapism and spermatorrhea; functional impotence Potential use for palliation; type 1 diabetes mellitus and diabetic complications; immunosuppression of T cell activity reducing pro-cytokines; bone formation and fracture healing; neoplasia; anti-microbial
Cautions	Illegal in many states; illegal for veterinarians to prescribe
Contraindications	Cannabis smoking is illegal in the majority of countries. Chronic use may lead to personality disorders and lack of motivation.
Herb Drug Interactions	Avoid pet ingestion with chocolate
Dosage	Medicinal dose = 0.1g of Cannabis indicae herba ie female flowers and associated leaves. Specific Medicine Cannabis: one to ten minims; it should always be tested by tentative doses

Notes: The official cannabis is indigenous to Asia, but the common hemp plant grows in America and many other parts of the world.

Ellington: Sedatives used in the control of pain: Physiological Action: Cannabis is narcotic. Bartholow classed it as a cerebral excitant. In some persons the drug causes excitement tending to acts of violence and crime; in others it excites merriment or a maudlin state. In general it produces hallucination, perverts the natural perception of objects, intensifies the perception of sound, dilates the pupils, abolishes pain, and in poisonous doses, causes spasms, convulsions, collapse, pale, clammy, insensible skin, extreme debility, feeble pulse, and finally paralysis of respiration. The habitual use of the drug causes bloating of the face, weak, tremulous limbs, injected eyes, imbecility, and ultimately death from marasmus. Those who use cannabis regularly believe that in medicinal doses it is not poisonous. It seems to be a true sedative to the stomach with few undesirable influences. Its best effects are secured when given in conjunction with alkalies in full doses or with mild aperients.

Therapy: Cannabis is sedative, narcotic, anodyne and, to a limited degree, anti-spasmodic. It acts upon disturbed function of the nervous system. It is a remedy for disordered mental action; disorders of motility, involuntary, irregular, muscular movements especially if of a distressing character; arrest or control pain; excitable and irritable hyperaesthetic conditions of the genito-urinary organs, with increased functional activity and uterine disorders; urinary irritation, where there are only a few drops passed frequently constant unsatisfied desire, burning pain and vesical tenesmus; it takes high rank in affections of the brain and nerves of the head, especially if nervous vertigo be present, and in those attacks of hemicrania which occur periodically, very distressing, causing delirium and much prostration. Dr. Cook of Seattle suffered from nervous breakdown with extreme exhaustion; tremor on awakening in the morning, with active functional heart disturbance; he took five drips of specific cannabis TID. All was cured. It does not suppress secretions of disarrange the functional operation of the stomach. It is an excellent sedative in functional disorders of the stomach with pain. It is of much use in paralysis agitans, in relief of the lightning pains of locomotor ataxia, and especially in chorea and in general muscular trembling. In chronic conditions accompanied by persistent pain, it ameliorates the pain. It must be given continuously in cases of neuralgic dysmenorrhea beginning before the expected paroxysm some little time and continued for a time after the paroxysm is relieved. It is an excellent remedy in gonorrhoea with sexual hyperesthesia; it arrests chordee, priapism and spermatorrhea, it controls violent erection and soothes the mental anxiety with aggravates the symptoms. It cures many irritable states of the bladder. It is curative in strangury and painful urination with burning and scalding.

Scudder: *Specific indications:* Burning in urethra and throughout the urinary tract; frequent micturition with burning; Excitement of the reproductive function with erectious, lascivious dreams and thoughts; Chordee and; Gonorrhoea. *Therapeutic action:* Indian Hemp is said to be narcotic, anodyne, antispasmodic, sedative, and aphrodisiac. It has been used mostly as a sedative in painful spasmodic affections. In neuralgia, sciatica, and chronic rheumatism, it has been found to be quite efficient. In conclusion, coughs, asthma, and pertussis, it is said to mitigate, the urgent symptoms. It enjoys some reputation as a curative agent in tetanus and hydrophobia, owing to its sedative action. We employ Cannabis principally in the treatment of gonorrhoea, where it exerts a most marked influence.

Fyfe: the soothing influence of cannabis indica is of great value in the treatment of many nervous wrongs. In the delirium which is sometimes associated with fevers, it is a very useful remedy, and in convulsions, as well as in irritable reflexes generally, its action is gratifying. In the treatment of sciatica a place for the exhibition of cannabis indica is often seen, and in rheumatism its influence is often decidedly relieving. It has been extensively employed in gastralgia and usually with the most satisfactory results. In the distress of diarrhea due to indigestion it exercises an influence which is prompt and satisfactory, and in whooping cough, as well as in other convulsive coughs, its action is modifying in character. In the diseases of women, when hyperesthesia of the genitals is a marked feature, cannabis is especially indicated. Hysteria, dysmenorrhea and uterine hemorrhage, when caused by neurotic excitement are controlled by this agent. It is also a good remedy in cystitis and in gonorrhoea.

Medicinal doses of the drug relieve pain and nervousness and are followed by a pleasing, refreshing sleep. Full or overdoses cause a species of drunkenness or intoxication. The continued use of large doses of cannabis indica is said to be a prolific cause of insanity. It is though a remedy for irritation of the genito-urinary organs and for depressed nervous action. It may be given with great confidence in irritation of the kidneys, bladder or urethra; in strangury, dysuria, and in spasm of the sphincter vesicae. It is as fully efficient in cystitis and in urethritis-acute, chronic or spe-

cific. It lessens excitement of the reproductive organs and dispels lascivious dreams and thoughts. It is highly recommended in Bright's disease, with a painful discharge of bloody urine; in hematuria, in impotence, and in certain cases of diabetes. As a stimulant to the nerve centers; that is for its anodyne, antispasmodic, hypnotic or narcotic effects; it is a reedy that demands a foremost place in the treatment of many diseases; hysteria, hay fever, and asthma; relieve the pain of gout, as well as the distressing itching of eczema, senile pruritis, and of skin troubles generally.

Winslow: Arabian habitués of this preparation are frequently impelled by its influence to deeds of violence. They are called "haschaschians", hence the English, assassins. Gunjab, or ganga, is the dried plant used in India for smoking. Churrus is the resin and epidermis scraped off the leaves. Bhang consists of the young leaves, flowering and fruiting tops and resin resulting from the first season's growth. Indian Hemp is a distinct depressant to the functions of the brain and cord in poisonous doses, although therapeutically stimulating these organs in small quantities and producing in man a kind of intoxication and mild delirium. The reflex activity of the spinal cord is primarily increased but this is succeeded by diminution of reflex movement and after large doses by anesthesia and loss of voluntary motion. The sensory tract is depressed by considerable therapeutic doses. A horse receiving, 1/2 ounce of the solid extract, became drowsy. Sleep after a few hours deepened into stupor and stupor into coma. The animal had to be supported in slings and recovered after three days. Use is indicated for: the relief of 1. Pain; 2. Spasm; and 3. Nervous irritability. It is only superior to opium in not causing constipation, anorexia and indigestion and is therefore sometimes given in colic to horses, and the relief of pain and spasm. The permanency of the action suggests its use in conditions of long continued pain or spasm. The results reported in veterinary practice in the treatment of tetanus have been favorable; over half the cases have recovered.

Jeremy Scherr: considers Cannabis a better sycotic miasm remedy of today's world than Thuja.

Rob Silver: Static Ataxia is unique to the canine. It is postulated that these effects are due to the high density of endocannabinoid receptors found in the canine cerebellar molecular layer as well as the hippocampal formation and basal ganglia. Industrial hemp is defined as having less than 0.3% THC on a dry matter basis in the plant. It is not uncommon for industrial hemp plants to contain large amounts of the other phytocannabinoids which are non-psychoactive but also possess medicinal benefits. It is felt that it is the modern hemp plant that was originally used medicinally in ancient times; not the modern cannabis plant, which has been highly bred to produce large amounts of THC.

Research (amazing number of studies): should be considered translationally in colorectal cancer prevention and cure; may possess the ability to suppress genes that are positively involved in the metastasis of cancer cells in vitro; safe, effective treatment for concurrent disorders in seriously mentally ill correctional populations; endocannabinoids regulate affective states and participate in memory consolidation, retrieval, and extinction. Clinical findings showing a relationship between Cannabis use and PTSD, as well as changes in endocannabinoid activity in PTSD patients, further suggest the existence of a link between endocannabinoids and maladaptive brain changes after trauma exposure. Along these lines, we suggest that endocannabinoid degradation inhibitors may be an ideal therapeutic approach to simultaneously treat the emotional and cognitive features of PTSD, avoiding the unwanted psychotropic effects of compounds directly binding cannabinoid receptors; in patients with IBD and subjectively improved pain and diarrheal symptoms; appears to be a promising solution for a meaningful proportion of patients with MS-related spasticity; potential of cannabinoid medicines in the following indications: symptomatic relief in multiple sclerosis, chronic neuropathic pain, intractable nausea and vomiting, loss of appetite and weight in the context of cancer or AIDS, psychosis, epilepsy, addiction, and metabolic disorders; cluster headache.

WANT TO LEARN MORE?

Purchase Dr. Robert Silver's Teleseminar from July 21st, 2015 entitled "Cannabis sativa L - A Treasure-Trove of Medicinal Benefits". Dr. Silver begins this 90 minute discussion by describing the botany and the botanical compounds found in Cannabis sativa L. He then explain show these compounds interact with the mammalian endocannabinoid system to produce specific biological effects. He concludes his talk with a discussion of the potential medical benefits that have been derived from research and observations over the past several hundred years that Cannabis sativa L. has been studied. Advice on what legal constraints veterinarians encounter regarding the use of this plant is covered as well! [CLICK HERE TO ORDER YOUR COPY!](#)

VBMA TELESEMINAR REVIEW

Dr. Silver's Cannabis sativa L: A Treasure Trove of Medicinal Benefits Teleseminar

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

Dr. Rob Silver is currently one of the leading experts on the medicinal use of Cannabis sativa. Cannabis has been cultivated by humans for over 10,000 years. Ancient peoples used every part of the plant - the stems and stalks for fiber to make rope and cloth, the seeds for nourishment and the roots, leaves and flowers for medicinal and ritual use. Similar to any plant, Cannabis contains hundreds of phytochemicals, many of which have medicinal effects. These constituents include cannabinoids, terpenes and terpenoids, flavonoids, non-cannabinoid phenols, nitrogenous compounds and other plant constituents. Within the species there has been great variation of concentrations of these compounds. There are two main cultivars of Cannabis sativa which have been defined by the dominant cannabinoid present and the amount of fiber contained in the stalks. The first is 'hemp' which contains a higher amount of the cannabidiol (CBD), non-psychoactive and the second, 'marijuana', which is psychoactive and contains higher levels of THC. **Local regulations vary from state to state as to the legality of growing both hemp and marijuana; you must be aware of the law!!** For the most accurate information about the legal use of marijuana, Dr. Silver provided several web sites to obtain the most accurate information: NORML: <http://norml.org/states>; PRO-CON: <http://medicalmarijuana.procon.org/view.resource.php?resource-000881>; GOVERNING: <http://www.governing.com/gov-data/state-marijuana-laws-map-medical-recreational.html>.

One must be aware that the medical marijuana laws, state by state, are for human physicians and their human patients, not for veterinarians or their patients. Currently, veterinarians are not allowed to prescribe and dispense cannabis. Yet hemp oil is easily available and can be used to avoid the legal conundrum.

Dr. Silver then delved into a close look at the major and minor cannabinoids and their physiologic effects - I recommend purchasing the audio recording of this discussion as his explanations of these cannabinoids was very in depth and detailed. [CLICK HERE](#) to order a copy. The effects of these constituents include anti-anxiety, anticonvulsant, anti-inflammatory, analgesic, antifungal, anti-depressant, sedative, and more. The biological effects of cannabis are due to interactions among the many various phytoconstituents of cannabinoid, terpenes and terpenoids. This makes the whole plant more effective and potent than one single extracted phytochemical. His talk also covered the most current cannabis research in dogs. It is interesting that dogs have the highest concentration of cannabinoid receptors in the cerebellum. Their hippocampal formation is also very dense in specific locations. Dogs also are the most susceptible for static ataxia, an unwanted side effect that is characterized by swaying movements, hypersensitivity to moving objects and a prance-like foot placement, yet most dogs rapidly developed tolerance. There seems to be a receptor-dependent mechanism of action of the cannabinoids while the terpenes and terpenoids have a non-receptor dependent interaction. Dr. Silver explained a number of these non-receptor dependent actions. The terpenes and terpenoid also have analgesic, anti-inflammatory, anti-anxiety, anti-epilepsy, anti-cancer, anti-bacterial, anti-fungal that work synergistically with the cannabinoids. The talk moved on to the clinical applications, indicated in cases of: inflammation and immunomodulation, acute and chronic pain both centrally and peripherally modulation nociception, epilepsy, anxiolytic, CBD exerts benzodiam-independent activity, neuroprotectant, CBD acts as an antioxidant and could be indications in Alzheimers, Parkinson's and Huntington's disease, anti-emetic, diabetes mellitus as CBD has been found to be to inhibit diabetes in experimental models; it reduces pancreatic inflammation and antioxidant effects; Bone formation and fracture healing; cancer; antimicrobial; cerebral ischemia, myocardial ischemia, psoriasis, intestinal inflammation, arthritic inflammation and pain; immunosuppression of Y-cell activity reducing pro-inflammatory cytokines; reduces vomiting both Chemotherapy-induced vomiting; and motion sickness. Client education will be very essential if a recommendation for cannabinoids is given.

The use of cannabis is a 'hot' topic today and veterinarians are in need of current information. Dr. Silver's talk was very informative on all aspects of cannabis, and his lecture style was well organized and easy to follow...simply a must for all in clinical practice.

HERBAL EXPOSITION: JAVA PLUM

The Purple Javanese Plum: A Review

“Jambolan,” “Jamun,” *Syzygium cumini*, *Eugenia jambolana* Lam.

By Ihor Basko, DVM, CVA Kapaa, Hawaii



Introduction

The next time you visit Hawaii and park under the shade of a Java Plum tree, you will always remember it because if the fruit gets on your white car or white “tropical” clothes... it stains for life! As I look at my purple-stained white truck, I have often wondered why it is here taking over the island. From where did this invasive plant originate, and by who and why was it brought to Hawaii?

To my astonishment, through my research on the Java Plum I learned this tree can “Heal All That Ails.” Brought to Hawaii in the 19th century, this invasive species could, ironically, be the medicinal plant to cure the top six diseases prevalent in Hawaii: diabetes, obesity, heart disease, high blood pressure, stroke, and cancer.

Because of our cultural, religious, and political biases, Americans often distrust research that comes from countries such as Pakistan, India, Indonesia, Russia, Siberia, Africa, Cuba, and Brazil. Unfortunately, this causes us to miss out on learning about many useful plants that have been used by other cultures for centuries.

One such obscure medicinal plant is the Java Plum tree. Because of its reputation for staining, and its invasive nature on Kauai, it has been deemed a pest, and consequently has not been recognized or explored for its medicinal properties.

This paper is a compilation and personal interpretation of the work of many botanists, pharmacologists, biochemists, and physiologists. My experience using this great plant in my veterinary practice is just beginning. Following are some important aspects of the plant’s usefulness in medicine.

The Nature of the Plant

Java Plum (*Syzygium cumini*) was likely introduced to Hawaii for its fruit, which is very astringent, sour, sweet and spicy. It is spread by birds that eat the fruits and disburse the seeds throughout the jungles and forest lands. Java Plum is native to India, Bangladesh, Nepal and Indonesia. It can also be found growing in the warmer regions of the USA such as Florida, and other parts of the world such as Eastern Africa, South America and Madagascar. It is a fast-growing tree with lance-shaped leaves that provide plenty of shade. It produces small, white flowers in March, and fruit in June. In Hawaii, it flowers in June through September, with fruits popping from August to October. The fruit is abundant and ovoid, ripening to purplish-black from green.

The plums I have sampled growing around my home are incredibly astringent and sour/sweet with a bit of an aromatic resinous aftertaste. It was suggested by a friend that different trees have different levels of sweetness depending upon the soil. The ripe fruit can be eaten raw, or juiced and made into ice cream. (I am currently attempting to make wine, vinegar, and kombucha.)

Traditionally, the ripe fruits are used to prepare health drinks, juices, jellies and wine. The pulp of the plum is highly nutritive (Noomrio & Daho 1996; Paul & Shaha 2004; Baliga et al 2011). See Table 1. All parts of the tree and, importantly, the seeds, are used to treat a range of ailments, most commonly, diabetes mellitus (Swami, Thakor, and Patil 2012).

Virtually all parts of this medicinal tree provide nutritional support to the body with minerals, vitamins, amino acids and carbohydrates. Studies have demonstrated that compounds in the *Syzygium cumini* tree are:

"...antibacterial, antifungal, antiviral, anti-genotoxic, anti-inflammatory, anti-ulcerogenic, cardioprotective, anti-allergic, anticancer, chemopreventive, radioprotective, free radical scavenging, antioxidant, hepatoprotective, anti-diarrheal, hypoglycemic and antidiabetic." (Baliga & Bhat 2011, Ayyanar & Subash-Babu 2012)

Table 1. Nutrient Content of *Syzygium cumini* / *Eugenia jambolana*

Minerals	Vitamins	Carbohydrates	Amino Acids
Sodium	Ascorbic acid	Glucose	Alanine
Potassium	Thiamin	Mannose	Asparagine
Calcium	Niacin	Sucrose	Tyrosine
Phosphorus		Maltose	Glutamine
Iron		Fructose	Cysteine
Zinc		Galactose	

Phyto-Chemistry

Practitioners can treat almost any disease using the different parts of just a single Java Plum tree. Scientific studies have demonstrated that the various extracts of the tree possess a wide range of pharmacological properties.

The tree is made up of many complexes of sterols, anthocyanins, antioxidants, essential oils.

Anti-Diabetic

Before the discovery of insulin, Java Plum's greatest popularity was for the treatment of diabetes. Jamun fruit seeds and pulp have been reported to serve various purposes in diabetic patients, such as lowering blood glucose levels and delaying diabetic complications including neuropathy and cataracts (Shrikant 2012).

The **seeds** have hypoglycemic and anti-hyperglycemic activity. The seeds contain alkaloid, jambosine, and glycoside jambolin which halt the diastatic conversion of starch into sugar (Bopp 2009). In rat studies, an aqueous extract of *Syzygium* at a dosage of 0.75 g/kg b.w.t. demonstrated maximum blood glucose lowering effects in both normal and diabetic rats (Rao and Rao 2001). Fairly high doses of extract are needed to reduce blood sugar levels by 30%. Some adverse effects to be expected are gastrointestinal upsets due to the plant's astringent nature (Helmstädter 2008).

Diabetic rats treated with Java Plum seed showed a significant decrease in liver enzyme activities (SGOT, SGPT, ALP) as well as decreased levels of serum BUN and Creatinine, indicating a protective role against liver and kidney damage (Kasetti, Rajasekhar, Kondeti, et al 2010).

The **leaves** also lower glucose by inhibiting adenosine deaminase activity (ADA) in hyperglycemic patients.

"...results suggest that the decrease of ADA activity provoked by ASC (aqueous leaf extract) may contribute to control adenosine levels and the antioxidant defense system of red cells and could be related to the complex ADA/DPP-IV-CD26 and the properties of di-peptidyl peptidase IV (DPP-IV) inhibitors which serve as important

regulators of blood glucose" (Bopp 2009). The decreased weight in diabetics is common and due to excessive breakdown of tissue proteins. Treatment of diabetic rats with *Syzygium* improved body weight significantly by preventing muscle wasting due to their hyperglycemic condition" (Swami, Thakor, and Patil 2012).

Decreased weight in diabetics is common and due to excessive breakdown of tissue proteins. Treatment of diabetic rats with *Syzygium* improved body weight significantly by preventing muscle wasting due to their hyperglycemic condition (Swami, Thakor, and Patil 2012).

Water extracts of *E. jambolana* **fruit** pulp was more effective than the ethanol extract at reducing fasting blood glucose and improving blood glucose levels in glucose tolerance tests (Sharma 2003). *E. jambolana* also increased blood insulin levels in both diabetic and severely diabetic rabbits. Inhibition of insulinase activity from liver and kidney by extract of *Eugenia jambolana* also has been reported, which demonstrates its extra-pancreatic mechanism (Sharma 2006).

Another study also found that *E. jambolana* **seed** extract reduced blood glucose, glycosylated hemoglobin, and increased plasma insulin (Ravi 2009).

The **fruit** combined with **bitter melon** decreased insulin levels that were raised in diabetic rats fed a high fructose diet (Shrikant 2012).

Oral administration of **bark extract** to diabetic rats exhibited anti-diabetic activity by "significantly" lowering blood glucose and urine sugar levels. Additionally, diabetic rats had "significantly elevated levels of plasma insulin and C-peptide." These findings indicate a "dual action," i.e. pancreatic and extra-pancreatic mechanisms, of Java Plum bark extract and potentially would provide better control of serum glucose levels than conventional "mono-acting" drugs (Saravan 2006).

Table 2. Chemistry of Java Plum

Leaves	Leaf Essential Oil	Bark	Flowers	Fruit Pulp	Seeds
Beta-sitosterol Betulinic acid Catecholic acid Mycaminose N-hepatcosane N-nonacosane N-hentriacontane noctocosanol N-triacontanol N-dotricotanol Quercetin Myricetin Myricitrin Flavonol glycodises myricetin 3-O-(4-acetyl) alpha-L rhamnopyranosides Acylated flavonol glycosides"	Pinocarveol Alpha terpineol Myrtno eucarvone Muurolol Alpha myrtenol Cineole Geranyl acetone Alpha cadinol pinocarvone	Friedelin Friedelan-3 Alpha-ol Betunlini acid Beta sitosterol Beta sitosterol-D-glucoside Kaempferol Gallic acid Ellagic acid Gallotannin Ellagitannin Myricetine	Oleanolic acid Ellagic acid Isoquercetin Quercetin Kampferol Myricetin	Anthocyanins Delphinidin Petunidin Malvidin-diglucosides	Jambosine Gallic acid Ellagic acid Corilagin 3,6-hexahydroxydiphenoylglucose, 4,6-hexahydroxydiphenoyl-glucose 1-galloylglucose 3-galloylglucose Quercetin Beta-sitostero
(Mahmoud, Marzouk, Moharam, El-Gindi, & Hassan 2001; Sagrawat, Mann, & Kharya 2006; Baliga, 2011)	Shafi, Rosamma, Jamil, & Reddy 2002)	Rastogi & Mehrotra 1990; Sagrawat et al. 2006)	(Sagrawat et al 2006)	(Li, Zhang, & Seeram 2009; Sagrawat et al. 2006; Veigas et al 2007; Sharma, Viswanath, Salunke, & Roy 2008; Sharma, Balomajumder, & Roy 2008)	(Ratogi & Mehrotra 1990; Sagrawat et al 2006)

Anti-Inflammatory

An ethanolic bark extract has been reported to have anti-inflammatory activity. Rat studies concluded that *S. cumini* exhibits an inhibitory role on the inflammatory response to histamine, 5-HT and PGE2 (Muruganandan 2002).

Experimentally, the anti-inflammatory activity of an essential oil (β -pinene and β -caryophyllene) from the leaves was accessed by measuring inhibition of total leukocyte, neutrophil and eosinophil migration after pleural lavage following treatment with the oils at 100 mg/kg in mice artificially induced with pleurisy (Siani 2013).

Anti-Allergy

From the actions of *Syzygium's* anti-inflammatory compounds, one could suspect anti-allergy effects. Experimental data seems to support its beneficial effects ("anti-edematogenic") on inflammatory respiratory diseases such as asthma, and allergic skin reactions that result in swelling and edema. The mechanism of action is due to inhibition of mast cell granulation, histamine blocking, serotonin effects, and the inhibition of eosinophil accumulation (Brito 2007).

Anti-Diarrhea

The seeds of *Syzygium cumini* have been reported to be useful as astringents in the treatment of diarrhea as well as dysentery, and ulcers in the GI tract (Shrikant 2012).

The bark contains tannins and carbohydrates, accounting for its long-term use as an astringent to mollify ailments such as diarrhea and gastric ulcerations (Chaaturvedi 2007).

Anti-Bacterial

Microbial studies show Java Plum's strong anti-bacterial effects, especially towards *Clostridium*, *Candida krusei* and multi-resistant strains of *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* and *Staphylococcus aureus*. The cultural use of the leaves to treat infections stimulated interest in the antimicrobial activity of hydro-alcoholic extracts of the *Syzygium* leaves, which proved to be effective against drug resistant strains of gram positive and gram negative human pathogenic bacteria and yeasts (Oliveira 2007).

Methanol extracts demonstrated significant effects against resistant strains, and could be considered an important treatment modality in the future (Duraipandiyar 2006).

The oil from the leaves showed activity against *Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococcus aureus*, *Candida albicans*, *Bacillus subtilis* and *Salmonella typhi*.

Whereas, the leaf water extract showed activity on all test organisms except *P. aeruginosa*, the stem bark extract showed no activity on any of the test organisms used (Ugbabe 2010).

Anti-Mutagenic

Fruits from the Java Plum were found to exhibit "potent" anti-mutagenic properties, most probably due to its high content of anthocyanins. A purified anthocyanin was found to suppress mutagenic DNA experimentally in *E. coli*, as one of the major mechanisms of antimutagenicity of this fruit (Saxena 2013).

Other studies show that the fruit increased apoptosis of cancerous breast cells, but did not affect normal breast tissues (Li 2009).

Anti-Oxidant

The plant is rich in compounds containing anthocyanins, glucoside, ellagic acid, isoquercetin, kaemferol and myrecetin (Ramya 2013.) HPLC (high performance liquid chromatography) data indicated that *S. cumini* leaf extracts contained phenolic compounds, such as ferulic acid and catechin, responsible for their antioxidant activity (Ruan 2008). (Also see table 2)

Radio-Protective

Often associated with exposure to pesticides and/ or radiation, lymphoma rates in dogs and humans is on the rise. One of the plant's timeliest discoveries is its protection against DNA damage caused by radiation, probably due to its high antioxidant content.

In one study, human lymphocytes exposed to radiation were greatly protected from DNA damage and subsequent mutations from dried leaf powder (Jagetia and Baliga 2002).

A seed extract of *Syzygium Cumini* injected intraperitoneally in mice exposed to different doses of gamma-radiation significantly reduced side effects and caused a significant increase in the animal survival rates (Jagetia 2005, 2007). The treatment of mice with different doses of leaf extracts consecutively for five days before irradiation, delayed the onset of mortality and reduced the symptoms of radiation sickness when compared with the non-drug-treated irradiated controls and also protected against bone-marrow death (Jagetia 2003).

In times of worry about radiation from the Fukushima nuclear reactor disaster, as well as nuclear waste storage and dumps around the world, the potential for radiation exposure and the resultant cancers increases with time. <http://climateviewer.com/2013/11/24/10-most-radioactive-places-on-earth/> Java Plum could provide inexpensive protection against exposure to radiation.

Anti-Oxidant/ Chemo-Protective

S. cumini's diverse antioxidant content can play an important role as a chemo-protective agent against oxidative stress and genomic damage. The plant is rich in compounds containing anthocyanins, glucoside, ellagic acid, isoquercetin, kaemferol and myrecetin (Ramya, Neethirajan, Jayakumararaj 2013).

Java Plum seed extracts demonstrated significant protective effects against chromosomal damage induced by genotoxic (DMBA & Urethane) carcinogens in mice (Arun 2011).

Three anthocyanins identified were glucoglucosides: delphinidin, petunidin, and malvidin, and are associated with the inhibition of rat brain lipid peroxidation by 94.4% (Viegas 2007). This could prove protective against dementia.

HPLC (high performance liquid chromatography) data indicated that *S. cumini* leaf extracts contained phenolic compounds, such as ferulic acid and catechin, which express antioxidant activity (Ruan, Zhang, Lin 2008). Aqueous leaf extract also showed hepato-protective effects in rats given carbon tetrachloride and reduced levels of AST and ALT significantly (Moresco 2007).

Besides the antioxidant-acting anthocyanins found in the fruits of *Syzygium cumini*, the plant also contains two main carotenoids: all-trans-lutein (43.7%) and all-trans- β -carotene (25.4%) and might be useful in preventing and treating skin and eye diseases (Faria 2011).

Heavy metals

In one study on the ability of three trees (Mango, Java Plum and Neem) to remove arsenic from contaminated drinking water, Java Plum bark scored the best, followed by Mango bark and Neem (Mumtazuddin and Azad 2012).

In a time where our drinking water is in high demand, yet is continually polluted by toxic metals, pesticides and fertilizers, the use of processed *Syzygium* bark to make a water filter could benefit poor countries who do not have the resources for expensive water purification systems. More research is needed to see what other heavy metals can be removed.

Medicinal Uses

All parts of the plant, particularly the seeds, have a long history of medicinal use in various cultures and traditional medical systems such as: Ayurveda, Unani (Islamic), Tibetan and Siddha (Traditional Tamil System of medicine prevalent since 4,000-6,000 BC. Still in use). Chinese medicine uses a close "cousin" *Syzygium aromaticum*, or clove. It has many similar properties: is antiseptic against bacterial and fungal pathogens, chemoprotective, an antioxidant, cardioprotective, and cancer preventative (Bhowmik 2012).

This plant is very much in demand for its use as a tropical medicine especially in India and Pakistan. The juice of the ripe fruit, a decoction of the fruit, or java plum vinegar may be administered to treat cases of "enlargement of the spleen, chronic diarrhea and urine retention."

Water-diluted juice is used as a gargle for sore throat, and as a lotion for “ringworm of the scalp.” Jambolan (Java Plum) juice mixed with Mango juice 1:1 will decrease thirst in diabetics (Shrikant 2012).

Because Java Plum has been proven effective in the treatment of diabetes mellitus, inflammation, ulcers and diarrhea, it could easily be integrated into a veterinary practice for these problems too.

Preclinical studies have also shown it to possess chemo-preventive, radio-protective and antineoplastic properties, and therefore could be a beneficial preventative against radiation damage, mutations, and cancer development.

With the rising number of MRSA and resistant strains of bacteria world-wide, it could become a novel treatment topically for infections of the skin, wounds, ears, and oral cavity.

Discussion

There is no doubt in my mind from the evidence presented that Jamun is an important medicinal tree to keep in our plant pharmacy.

Its preponderance and spread through the forests, overtaking many native species, labels it an invasive species and pest tree. But why not change the paradigm of thinking? Perhaps they are a blessing, crying out to us through the purple stain that keeps the plant in our minds every time we pull on that white T-shirt and get into that white car.

Can we harvest the tree, cull the excess, and make inexpensive medicine to prevent diseases and also help people suffering from diabetes, heart disease, cancer, infections, and other common maladies in Hawaii? All parts of the tree can be utilized: seeds, fruit, leaves, and bark.

As invasive species continue to take over native vegetation all over the world, and humans seem to “let it be”....not doing much to stop it, perhaps these plants are here for a purpose – to keep us healthy in a progressively polluted world?

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Dr. Basko graduated from Michigan State University's vet med program with a special focus in the fields of internal medicine, cardiology, and bone surgery. His early years in veterinary medicine were spent working in a busy emergency animal hospital in California. Dr. Basko has been devoted to the study and practice of acupuncture, herbal medicine, dietary therapy, homeopathy, massage, and other alternative therapies for animals since 1971.

Dr. B is also an educator and leading authority on holistic animal health. He is one of the founders of the Veterinary Botanical Medical Association. He frequently lectures to veterinarians, animal trainers, and animal caretakers on the use of Holistic modalities in Hawaii, North America and Asia. Aside from lecturing, he has published many magazine articles, chapters in books and journals, and has been a guest on numerous TV and radio shows.

HERBAL MONOGRAPH: SAINT JOHN'S WORT



Photo by fir0002, Wikipedia

COMMON NAME: Saint John's Wort

LATIN NAME: *Hypericum perforatum*

OTHER NAMES: Tipton's weed, Goatweed, Rosin Rose, Chase-Devil

Common Name: St. John's Wort	<i>Hypericum perforatum</i> ; <i>fipton's weed, Goatweed, Rosin Rose, Chase-Devil</i>
Family	Hypericaceae (Clusiaceae)
Part Used	Herb, flowering top; picked when they are dry from midsummer onward, preferable on a long, hot, dry summer day.
Active constituents	Volatile oil, resins, tannin, Glycoside- hypericin, stearic acid, palmic acid, myric acid; flavonoids, alkaloid
Actions	Aromatic, astringent, expectorant, calming/anxiolytic, sedative/antidepressant, nervous system restorative/ tonic, analgesic topically (flowers in oil), antiseptic topically, vulnerary, anti-inflammatory, antimicrobial
Indications	Neuralgia, sciatica, spinal irritation with tenderness and burning pain on slight pressure on the vertebrae, spinal injury; rheumatic pain, seasonal affective disorder, mild to moderate depression, lack of interest, tiredness, hyperthermia, menopausal depression, fibrositis, obsessive-compulsive disorder, anxiety and irritability, nervous fatigue, topically for lacerated or puncture wounds, bruises; Peripheral neuropathy, enuresis, urinary stones, disturbed sleep with night terrors; hemoptysis, hematemesis, chronic respiratory catarrh; bronchitis,
Cautions	Potential photosensitivity; should not be exposed to full sun if on high doses
Contraindications	No Chinese contraindications listed
Herb Drug Interactions	Avoid Hypericum if on cyclosporine, digoxin, nevirapine, indinavir, irinotecan, warfarin; use with caution is on tricyclic antidepressants, antihistamine, benzodiazepine, bronchodilators, and some selective serotonin reuptake inhibitors;
Dosage	Human: Daily dosage 900 mg extract; 1-10 g TID; Liquid extract (1:2): 15-40 mL per week Small Animal: dried herb: 25-300 mg/kg; Infusions: 5-30 g per cup of water; ¼-1/2 cup per 10 kg divided daily; tincture: 1:2-1:3: 0.5-1.5 ml per 10 kg divided daily Large animal: One handful of herb in two pints of water; one cupful twice a day

Notes: herbaceous perennial, leaves are opposite, linear to oval, unstalked with translucent dots; flowers have five petals, and are yellow with black dots, native to Europe, and introduced into the Americas, growing in grasslands, woods, and hedgebanks.

Energetics: Taste: Bitter, sour-astringent; slightly sweet, oily; cooling, to neutral; Matt Wood feels it is warm and dry with a balsamic taste; treats tissue states of atrophy, constriction, depression Organs: Heart, Kidney

Dioscorides: use Hypericum for malaria; sciatica and all aches of the hips.

Culpeper: It is under the sign of Leo, and the dominion of the Sun. It is a singular wound herb; it heals inward hurts or bruises; made into an ointment, it opens obstructions, dissolves swellings, and closes up the lips of wounds. With the juice of knot-grass, helps all manner of vomiting and spitting of blood, is good for those that are bitten or stung by any venomous creature, and for those that cannot make water. It doth gently expel choler or congealed blood in the stomach. The decoction drank somewhat warm before the fits of agues, whether they be tertians or quartans, alters the fits, and doth take them quite away. The seed is much commended to help the sciatica, the falling-sickness and the palsy.

Ross: Herbal pairs: Hypericum and Scutellaria for depression and insomnia; Hypericum and Avena for depression with menopausal emotional lability; Hypericum and Equisetum for enuresis. Hypericum is neutral in temperature, sour-astringent, bitter, and slightly sweet. Like Panax, it lacks the acrid property and is not moving. It can be calming, if taken long term, but lacks the rapid lifting of mood associated with aromatic herb such as Lavandula and Rosmarinus. The naphthodianthrones are antiviral, anti-inflammatory, antidepressant, antihyperthermic; the phloroglucinol derivatives are antibacterial, anti-inflammatory, antidepressant, anti-cancer; the flavonoids are anti-inflammatory, neuroprotective, anti-depressant, antihyperthermic, and anti-cancer. Hypericum's main use for depression has only been within the last 25 years. Weiss said it lightened the mood and could be used for both anxiety and depression.

Fyfe: Hypericum is a useful remedy when there is intense hyperesthesia in wounds, and in all lacerations, when severe pain shows that the nerves are greatly involved, it is of value. It is also deemed a remedy of merit in the nervous depression accompanying painful wounds, and in the nervous excitement following operation. This agent has been suggested as one likely to be of considerable usefulness in the treatment of spinal irritation. It is sedative, diuretic and astringent. Use is Indicated in: catarrhal conditions of the urinary passages; suppression of urine; chronic urinary affections; nervous affection with oppression; passive hemorrhages; contusions and lacerations of the tissues; diarrhea and dysentery. Locally, in forms of ointments, liniments and diluted tincture: tumors, caked breasts; bruises and swellings; ulcers.

Ellingwood: Specific Symptomatology - Muscular bruises, deep soreness, painful parts; a sensation of throbbing in the body, without fever; burning pain, or deep soreness in the spin upon pressure, spinal irritation, circumscribed areas of intense soreness over the spinal cord or ganglia; concussion, shock or injury to the spine; Lacerated or punctured wounds in any location, accompanied with great pain. Homeopathic physicians use it to prevent convulsions from spinal injury, and will prevent tetanus from punctured wounds, relieving the pain resulting from injury. It is much value in the treatment of piles; used as a fomentation or ointment it is applied to tumors, caked breasts, enlarged glands, ecchymoses, bruises, swellings and painful ulcers.

Grieve: recommended its use also in chronic respiratory catarrh, hysteria and nervous depression.

Juliette de Bairacli Levy: The herb is astringent, and is much used as a pectoral, wound herb and in rheumatic complaints. The fresh flowers steeped in olive oil make a treatment for all wounds and skin complaints. The herb, combined with chamomile, is made into an ointment which is renowned for its pain-quelling and soothing qualities. The whole plant is well liked by cattle, goats and sheep. A thorny species, which grows in Eastern countries, is pickled in vinegar, the flower buds and used as a digestive tonic. It is used in the treatment of coughs, inflammations of the chest and lungs, pulmonary ulcer, rheumatism, jaundice, Hodgkin's disease, dropsy, earache and inflammation; worms; externally: treatment of all wounds, eruptions, ulcers, swellings and skin inflammations.

Matthew Wood: As a sweet, oily tonic, it improves digestion and metabolism. It builds tissue tonic, helps the liver process complex toxins, and slightly strengthens the eliminative faculties. It is a stomach normalizer applicable in both hyperacidity and hypoacidity. It is suited to weakness of the digestive nerve reflexes and the enteric brain, or animal instincts in the guts. Like other balsams, St. John's Wort has a powerful effect on the nervous system. It is best known as a first aid remedy for injuries to nerves and is suited to injuries to parts rich in nerves, eye, fingertip, spine, where there are sharp, shooting pains, inflammation along nerves, acute sensitivity and pain, blood poison from injuries to fingers and toes, and clonic spasms and convulsions from inflamed nerves. Hypericum was considered a specific for titanic convulsions in homeopathy. It is one of the most important herbal pain-relievers. Russian herbal indication are extensive; it is considered to be a liver remedy, and a detoxifier; it is particularly called for incases where the inner-ventions of the digestive tract, the autonomic, are weak and there is tension for a toxic liver; "Liver overpowering the

Spleen." St. John's Wort and Wood Betony were the two most important remedies for psychiatric problems in the Middle Ages, the ill-effects of witchcraft and demons; both plants strengthen the enteric brain, seat of the instincts, and it is in this manner they are stronger. Specific indications: anxiety depression; insomnia, afraid of the dark; wintertime depression; weakness of gut-level instincts; inability to trust instincts; chronic fatigue and mental burnout; concussion to brain or spin, fireworks in front of your eyes; meningitis; stiff neck; gum disease; offensive breath; cough bronchitis; bleeding from the lungs; whooping cough; asthma; irritated but weak digestion; stomach normalizer, weakness of appetite, malnutrition, diarrhea, dysentery, hemorrhoids; liver weakness; stress emotions, fear, tension, influencing the bladder; excessive urination, bedwetting; suppressed urine, ulceration of the urinary tract; pus in the urine; damaged immunity; postpartum; afterbirth pains; coccygeal pains; breasts; swollen, hard tumors; paralysis; rheumatism; tetanus; injuries to parts rich in nerves, with inflammation, convulsion, spasms; redness, heat, shooting pains; sharp, shooting pains along nerves; neuralgia, sciatica; pains in the coccyx; deep wounds; heals from the inside out; corns; boils, carbuncles; radiation burns.

Holmes: St. John's Wort is a gentle remedy. As a first aid and topical remedy combining anti-inflammatory, analgesic and vulnerary action, is one of the best for treating burns, ulcers and wounds presenting inflammation and pain. Pain from nerve injury or neuritis is especially well relieved. With its antiviral action, helps with viral skin disorders. In chronic conditions, it scores where nervous deficiency leads to constrained Qi presenting nervous tension, spasms and depression. The herb's nervous trophorestorative effect promotes relaxation and in the more long-term a gradual recuperation of energies and spirits. Its cerebral activity has been shown antidepressant and sleep-regulating. It is a systemic relaxant that releases tension and spasms in both smooth and striped muscles. Its spasmolytic, analgesic and neuromuscular relaxant actions work on conditions as diverse as spasmodic dysmenorrhea, neuralgia, tight muscles and headaches. The remedy's action on the bladder stands out. Dripping, difficult, painful urination, especially when arising from neurogenic bladder, is comprehensively treated. St. John's Wort addresses not only incontinence and bedwetting, but also albuminuria and mucous in the urine. In other words, damp cold in the urogenital system is cleared because of its Tonifying action on Kidney Qi. The herb's astringency extends to the capillaries in a hemostatic action that again works particularly well for bleeding from the lower orifices.

BHP: menopausal neurosis; sciatica and neuralgia

Research:

Hypericin is antiretroviral (HIV, feline immunodeficiency virus, caprine encephalitis virus, equine infectious anemia virus, feline leukemia virus, feline sarcoma virus,). Interestingly photosensitization is required for inactivation of equine infectious anemia virus by hypericin; activity against the following enveloped viruses- Herpes virus, Pox virus, togavirus (American equine encephalitis virus), orthomyxovirus (equine, swine, bovine and avian influenza), paramyxovirus and morbillivirus (canine parainfluenza, avian newcastles disease, bovine parainfluenza, canine distemper, Australian equine morbillivirus), coronavirus (enteric coronaviruses and FIP). Hypericum does not help naked viruses (picornaviruses and papovaviruses); can protect the liver against IR; positive cases of mild to moderate depression; leads to nonselective inhibition of uptake of many neurotransmitters, as well as interaction with dopamine and opioid receptors; indirectly activates sigma receptors; efficacy for obsessive-compulsive disorder; Hypericum was effective against *Paenibacillus larvae*, a spore-forming, Gram-positive bacterial pathogen that causes American foulbrood (AFB), a lethal disease affecting honeybee brood worldwide; As antioxidative agent, Hypericum perforatum has both local and systemic protective effects in ischemia reperfusion injury; anti-ulcer activity; inhibitory activities on the growth of human cervical cancer HeLa cell lines; safe and efficacious for use in antitumor therapy; have significant therapeutic benefits against diabetic complications and atherosclerosis; induced protective effects on oxidative stress by modulating Ca^{2+} influx; prevention or limitation of β -cell dysfunction and loss in type 1 diabetes

Traditional use in China:

Guan Ye Lian Qiao: whole plant is used; Classified as neutral and slightly bitter

Uses:

- Treat nosebleed, hemoptysis, intestinal bleeding, external bleeding due to trauma
- Clear Heat Toxin
- Treat swellings and burns

A DAY IN THE LIFE

Featuring Cynthia Lankenau

DVM, CVA, RH (AHG), Both CIVT's, at the Holistic Center for Veterinary Care, Colden, NY

My practice is a mixed animal, alternative modality based located 45 minutes south of Buffalo in a beautiful hilly country area; overall split 50:50 with interesting seasonal variations. In the winter, I have the most dairy work of the year due to environmental stress, and in the summer, the horse work explodes with show season work. The small animal work is steady except when we have our classic eight foot snow falls, and then no one leaves home! I am in the small animal office two days a week, large animal two days, one day is the swing day (although that day is when I try to sneak in a quick river Drift dive) to handle the overflow and on the weekend I try to have one day off with either Sunday afternoon or Saturday morning open for any emergency situations.

Currently it is the middle of show season and my normal large animal days are filled with routine chiropractic/acupuncture work on these hard working animals with not as much herbal work. Most riders are nervous about any residuals that could test positive in drug screens and, despite assurances, they try to avoid the use of herbs and rely instead on consistent and frequent visits.



So many of the interesting herbal cases happen over the weekend, therefore our day will start noon on a Sunday. My husband is mowing hay at his home farm in Boonville, NY and my daughter is off at graduation parties, so I'm working.

I stock my truck and then am off in my sturdy vetmobile. It's a modified Subaru Baja, with the back set up for bulk herbs, both Chinese and Western extract granules are on the upper right, bandage materials, topical and hoof stuff are on the upper left. A variety of patent tea pills, acupuncture needles, blood tubes and homeopathic are in the drawer-mid-right. I keep all of the freezable stuff - homotoxicology and liquid homeopathics and herbal tinctures- in the back seat.

Our first call is a trail riding Arab family with three aged horses; Kim, April and Trinket; and one youngster, "Gilly" (Gilly was born with persistent embryonic 'gills' that over time, with Xue Fu Zhu Yu Tang, have shrunk to be of no concern). Officially, the call is just a pre-seasonal check up; the owner really just wants a chiropractic exam. This family, over the past years, has suffered from many tragic losses. Reflecting this emotional trauma, I feel, all of the horses are severely heart deficient. They are expressing this in differing symptoms though. Kim has heaviness in her chest with an exertion related cough; Gilly has stagnation in her Liver, with subsequent fly bite hyper-sensitivity; April has poor circulation in her extremities with just heaviness to her hind legs with scruffy skin and Trinket looks worn out and tired. This family has a limited income so the treatments must be easy and simple. All of the horses primarily were needled in Ht 9, a dose of homeopathic Aurum met. 12 C, and routine chiropractic adjustment, L 5, and lower Cervical vertebrae were out in all. That satisfied the owner's expectations of the visit, but we still needed to ensure the symptoms related to their heart weakness. Kim was put on a simple of Blood root, 3 drops daily for two weeks. This herb has a very well reported use of balancing the blood flow in the chest.

With the allergic skin lesions and scruffy skin, both Gilly and April were left with some Noni fruit leathers; with additional Skunk Cabbage for April as a general Liver and Kidney detoxicant, 20 drops of a 1:3 tincture. Trinket was given the Elixir of Life; Shou Wu Pian, 5 tabs daily.

The next farm call was a goat with an old injury in her distal metacarpal area. Babette is a retired 15 year old Alpine/Boer cross dairy goat doe that caught her right foreleg in the hay feeder in the winter and suffered from a non-dis-

placed fracture in her distal metacarpal. She now had some significant arthritis in her metacarpal-phalanges. We have a trimmed birch branch in her pen for self-service pain relief. On acupuncture exam, she is Spleen Qi deficient with localized Blood Stasis. The original injury resolved well with Jin Gu Die Da Shang Wan, "The Great Mender", a patent Chinese medicine for bone and soft tissue trauma and with a splint. But now we are seeing the damp spring weather with the damp and hot summer weather develop into a different pattern. The Great Mender has been replaced with Yi Yi Ren Tang, or Coix combination; this formula is indicated in cases of osteoarthritis in cases with Qi deficiency with Blood Stasis.



Babette during her treatment and exam. Note the distal swelling on her right foreleg.

Her Chinese formula is being re-enforced with Prickly Ash bark, *Zanthoxylum americanum*, and Ginger root, *Zingiber officinale*, as a circulatory stimulant and anti-rheumatic; Gravel root, *Eupatorium purpureum*, to help dissolve the calcium deposits, to help resolve damp, Nettle root, *Urtica dioica*.

The next call is a 24 year old appendix Quarter Horse gelding, Red, who has a long history. He suffers from a Rabies miasm and chronic Lyme, which the two together synergistically make his chronic disease even harder to treat. This summer, he has an unresolved non-pitting ventral abdominal edema. Many Chinese formulas have been used, with a great response with Wu Pi Yin Plus, Jing Tang herbs, with *Andrographis* and with the use of Skunk Cabbage as a simple but there is still just a bit that has not resolved. On Acupuncture exam he is still Spleen Qi deficient and Qi stagnant; his tongue is swollen, pale purple and phlegmy. Having hosted a fantastic seminar with the NY CAVMA this past spring with Are Thoresen, I treated Red this time in accordance with Are's teachings; with just the distal Spleen point and Pine Needle Tincture; 60 drops of a 1:3 tincture twice a day. Although, since Red is still in a mental fog, I did add in *Alchornea cordifolia* as I am sure there are still Lyme or co-infections of Lyme still in him and Joyce Harman's lecture stating that Anaplasmosis may be responsible.



Note: Red's persistent edema and treating the distal Spleen point.



Following is a check up on a bowed tendon on a 33 year old trail horse, 'Dance'. Four days ago, he was stuck in a bog and after struggling to get out, his check ligament and superficial digital flexor tendons were swollen and edematous. Dance was three-legged lame. At that time, he received an acupuncture treatment designed to open the distal channels, placed on Tendon/Ligament, Jing Tang, and Jin Gu Die Da Shang Wan, and a pressure wrap with Mag-paste was applied to his leg. When I arrived, Dance appeared to be quite sound on the leg. And yippee, after taking the wrap off, no swelling or heat in the ligament. (The green is the mag-paste) The owner will still use support wraps and continue the tendon/ligament for basic support for at least another two weeks.

And a, oh by the way, do you want to look at the chicken?? One of their chickens has a huge fatty mass in the crop area. Henny, who is 1 1/2 year old, is also laying very soft-shelled eggs and production seems to be down. Hmm, well. Two things were of a concern, the lump feels like a huge lipoma, not in the crop but subcutaneous. She pulsed to be Spleen deficient, which would explain the poor mineral absorption and the poorly calcified eggs. Our discussion lead to the GMO and round-up ready corn in the chicken mash and the association of cancer with the use of GMO's. We decided to start simply with mixing 1/8 tsp of Wei Qi Booster in her chicken feed daily. Wei Qi Booster is a Jing Tang formula. The foundation of the formula is Six Gentlemen, Si Jun Zi Tang as our Spleen tonic with added anti-cancer herbs, Oldenlandia, Bai Hua She She Cao; and Scutellaria, Ban Zhi Lian to inhibit cell mutation and tumor growth. The owner will also sprinkle a pinch of ABC's Glyphosate Remediation Product in the chicken's mash.



On the way home, I stop by briefly to check on War, a mature Arab gelding that developed a severe laminitis during the early spring when I first was called to treat him. He has had severe liver disease for years while being on Pergulide for over ten years to treat 'metabolic syndrome'. Finally, his owner has stopped the Pergulide and things seem to finally be improving. He is currently on Hot Hoof II; Laminia-saver; Queen's Ann Lace as our pituitary restorative and Skunk Cabbage for his Liver detoxicant; Chick weed to help stabilize his metabolic syndrome and Dandelion as Are Thoresen's simple for Liver deficiency with Indian Pipe and Corydalis if needed for pain.



Now, the last call is one of my most favorite equine friends, a 47, yes 47 year old pony; my daughter's beloved Roxie. Two years ago, Roxie suffered from an acute disc protrusion in her L 3-4 area; worst on the left side. I really thought she was done; she was down almost convulsing with pain so I went into the house to find an old bottle of euthanasia solution and by time I was back in the barn she was up, glaring at me. So with Jing Tang's Double P; and Cramp Bark she made it through the crisis. Since then, we have an appointment every Sunday night to tweak her formula. (You know the carpenter's kids story, I really have to be diligent with my own pets to make sure I set aside enough time for them!!!) Lately she had been doing well on Equine Du Huo with added Solomon's Seal and Lion's Mane. Today going over her, she seemed Liver deficient; she has not yet fully shed out and her Liver blood seems a bit weak; her tongue is a little dry and pale. So I blended in Jing Tang's Tendon/Ligament formula with Nettle root with a touch up on her back.

So after I finish all of the chores in the barn, we have a barn full, go for a trail ride, hop in the pond for a swim, and eat supper; time to work on another VBMA monograph. I really have enjoyed being on the VBMA board. I encourage

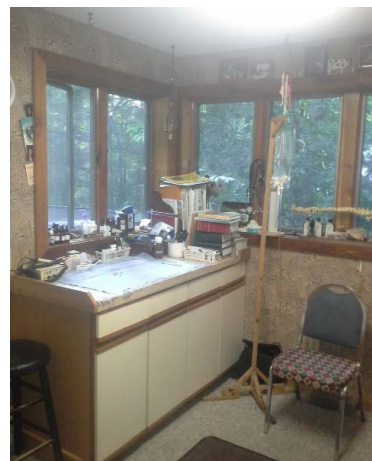
all of you to become more involved; writing the monographs has forced me to use all my old herbal books that were just sitting on shelves. I just love these old books! I think you enjoy being part of an organization when working for it rather than standing on the sidelines, so contact the office at office@vbma.org to volunteer!



Pure chaos; stacks of books everywhere when double checking old references for a monograph!!

Sunday night is also my time to catch up with anything from our new American College of Veterinary Botanical Medicine, register for our first ever conference at www.acvbm.org! And the NY CAVMA group, working on our site for Are Thoresen's 2016 meeting on November 4-6 2015. We are planning on Ghent, NY staying at and having lectures at the Won Dharma Retreat Center and the Small animal work at Hawthorn Valley, a biodynamic/ Waldorf School; Information at www.nycavma.org. Also I have to work on the details for our spring meeting with a plant botanist, Judith Somner and Terry Durkes with pulse diagnosis and gold bead implants. Then, I wait for my daughter to arrive safely home!

Monday morning comes early, a small animal office day. I have a cup of organic coffee and then I'm off to the barn for chores before the rush starts. My office is the converted mud room in our house. Clients walk in through the garage, past my vetmobile and herb storage area, into the reception area, and then into the exam room. It is a very small office - we only do a small amount of blood work, fecals and fecal egg counts, and urine analysis. Any other lab work is sent out. We offer no hospitalization, it is just an office. But I love it - it is quiet, my exam area looks out into the woods around our house with a view of the barnyard so I can keep an eye on my critters. We have a bird feeder right outside the window and in the winter the deer live under the feeder, plus an amazing array of birds are seen. We have minimal over-head so we can keep the office appointment charges affordable in our not-so-affluent part of the world.



Today we are starting at 7:15 AM; early, for sure, but the world seems crazy lately and we have been overwhelmed.

Casey is turning into a wraith; she is a 14 year old Female (sp) lab that has had a long history of chronic disease but three months ago developed a rapidly growing mass in her chest. There is constant pressure on her esophagus from the mass, causing her to gag frequently. She is currently on Xue Fu Zhu Yu Tang with added Turmeric and Blood root;

any other formulas she starts to retch horribly. Today, I used the 'C' point, Spleen Jing Well point, and gave her some B-vitamins. Homeopathically she has had a miraculous response to Ant. Tart. LM 1.

River is a 10 year old smooth coated Collie that is suffering from the ill-effects of a tick bite with an area of massive cellulitis. His diagnosis is Damp Heat and Heat Toxins. His tongue was red; pulse was rapid and superficial. His Bl 40, Spleen 10, Sp 9 and Liver 8 were needled. He was sent home on Wu Wei Xiao Du Yin 1 tsp of powder twice a day and a combination of 1:3 tincture of Andrographis, Cat's Claw and Japanese Knotweed with directions to use salt water soaks with Green and Chamomile tea.

Next in the office is a two cat family for a recheck. Blanco was seen a last months for weight loss and emotional fears. His tongue was swollen and pale with a slight quiver. He was diagnosed with Sp Qi deficiency and sent home on Six Gentlemen with 5 % added Valerian and 5% hops. Today, the owner reported that his fears are mostly resolved and he has gained 3 pounds. Looks like a good weight for him. His tongue looked normal, pulses were even and normal; owner was instructed to slowly decrease his herb over the next month. He also had a touch up of needling St 36 and Spleen 6. Blanco's sister is KiKi who in March of this year presented with a holosystolic murmur with a weak Kidney pulse. She has been on the Module formula Harmonize Heart and Kidney with added Hawthorne. Today, her heart auscultated normally, but her tongue was red with purple, ears were hot and her Kidney Yin seemed very weak. Her diagnosis was Kidney yin deficiency with Blood stagnation. She was needled on Kd 3 and 7; Sp 20, PC 7, Ht 7. Her herbal formula with changed to Xue Fu Zhu Yu Tang tincture; 5 drops twice a day with 10 % Hawthorne added and separately Zhi Bai Di Huang Wan; to tonify Kidney Yin and clear false heat.

Next through the door is Quincy, a male (castrated) poodle who originally came to our office with a diagnosis of having a pulmonary mass several years ago. He had Liver Blood stagnation with secondary heat rising into the chest. He is in for an annual check-up; his owner has no real complaints but on exam, his tongue was purple/dark red with pain on Bl 23. On Urine analysis, he had casts of RBC's. Yikes, I am thinking.....so Kidney stagnation, with secondary heat. On abdominal palpation, kidneys seem smooth and normal sized. He was needled in Sp Jing Well point to hold the blood; Sp 3 and 6 to help control the Kidney; and Bl 40 to treat the heat and stagnation. Herbally, Ba Zheng San with Buchu to first clear the heat stop the bleeding; instruction to bring back another urine sample in one week. (As an aside the mother-in-law mentioned an aside about the grand-kids playing rough with him?? Trauma?) Hmmm, he was given a dose of Bellis 30 C.

Luci, a 8 month old, yellow Lab was next. Her owner's chief complaint is a slight entropion. It is very minor but of a greater worry is Luci's love of eating rocks, any rock. Her tongue is cracked, pulse is thin; her diagnosis is Liver Blood deficiency with Kidney Yin deficiency. I think the rock eating is trying to relieve her false heat; entropion, Kidney Jing weakness. She was given a dose of Silica 1 M and was sent home on Qi Ju Di Huang Wan also with 'Stop Stool Eating' a digestive aid with probiotics to help curb her cravings. We talked about diet for quite a bit of time; hopefully her owner will at least try to feed her some real food.

Scotty, a 8 year old m (c) cat who was first seen in 6/10 for a rapidly growing squamous cell carcinoma on the left side of his tongue. (The owners had lost two other cats to SCC prior to Scotty's illness, all started after the cellar was chemically treated for molds.) Over the past 5 years, we enabled Scotty to control this cancer and it almost disappeared. Over the past six months, both owners had developed severe health issues. Scotty was brought in as the tumor was seen to be growing again. On exam, it indeed was twice the size it was 12/14. His Spleen energy was exhausted. He was treated with Spleen 1, 3. His herb formula was shifted to include Jing Tang's Wei Qi booster. He is also currently on Mushroom mix, Open Liver Canals (initially, Liver stagnation and Fire). Sweet Annie, with K'an's Cluster Dissolve with 25% Six Gentlemen. He will be back in three weeks for a recheck.

Our final patient for the morning is Cosmo; an 8 year old Pit bull rescue with a chief complaint of stiffness. He has a pale purple tongue, and wiry tight pulses, with improvement with needling GB 34. He was diagnosed with Triple Heater Obstruction possible retained pathogen. He was treated with acupuncture; GB 34 was re-enforced with Bl 18, 20, Liver 14. Cosmo was sent home on Xiao Chai Hu, and Darcy's LD-CO, Vitamin C.

Time to catch up on phone calls, another cup of organic tea before the afternoon....so there is 24 hours in my little office; a wonderful variety of cases located in a great area. Herbal medicine is definitely the foundation for support of my cases but I love the blend of acupuncture, chiropractic and homeopathic.

We hope you enjoyed the Summer/Fall 2015 Edition of the Journal of Veterinary Botanical Medicine!

Our Journal content is provided entirely on a volunteer basis, and we'd be remiss if we didn't take a moment to thank all of our generous contributors. They take time out of their very busy schedules to write articles, take photos, dig up case reports, recipes and so much more in order to share their knowledge with all of our readers. So, a hearty THANK YOU to all our contributors!

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.



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