

SPECIAL DOUBLE ISSUE
AWARD-WINNING PUBLICATION!

AFA WATCHBIRD

Journal of the American Federation of Aviculture



VICTORIA CROWNED PIGEONS

VOLUME XXXIX • NUMBERS 2 & 3 • 2012



The Many Uses and Benefits of Blended Teas in Aviculture

Story and photo by Jason Crean

Flowers, leaves, twigs, herbs, and roots blended together with natural waters brewed by the sun's heat creates natural teas in the environment. There are many health benefits to those who drink the specially blended and brewed teas, specifically our birds. Customized tea blends can help birds in a variety of ways such as skin and feather quality, immune system function, detoxification and improving organ function, digestive aids, respiratory health, weight loss and fat oxidation, and hormonal issues.

Though water quality is important for

our avian companions, what birds drink in the wild is far from sterile. It is commonly known that many species of birds visit water sources like tree hollows in which plant components leach their tannins and other compounds and minerals. And many of us have seen wild birds drinking from "dirty" puddles and other water sources that are brewing with fallen leaves and mud.

According to Chinese legend, Chinese emperor Shen Nung drank some hot, discolored water after some leaves had been blown into it. He was pleased and continued to experiment with the brewing of different leaves. The common tea leaf is from the plant *Camellia sinensis*,

a flowering shrub native to China. Over time, this practice spread around the world and we now have many types of teas that are brewed using the leaves, flowers, buds, seeds and twigs from a variety of plants from which we garner important nutrients and minerals.

You may ask how this affects your birds. The purpose of this article is to simply share our experiences with the use of teas in our program and stimulate readers to begin their own research on this topic. Special thanks to avian veterinarian and integrative medicine specialist Karen Becker, DVM, NMD who has increased our knowledge on this topic and was the impetus for our research. We

have incorporated these teas into our avicultural program and continue to recommend these additions to zoos and other institutions that have birds as part of their collections.

Different types of Camellia teas are commonly used and they differ according to the time the leaves are harvested and the process used to prepare them. The younger the buds and leaves, the more caffeine. They also differ in their benefits to animal physiology. It is important to mention that Camellia teas contain caffeine so they should be decaffeinated by way of a natural process using carbon dioxide (CO₂) and/or water, not chemically treated. Many commercial teas may say “naturally decaffeinated” but use ethyl acetate which should be avoided. It is essential to choose your teas wisely and buy organic loose leaf teas whenever possible.

Teas from the Camellia plant include the popular green and black teas, as well as white and oolong teas. Green tea consists of young leaves that are picked and dried quickly to avoid oxidation. Oxidation is simply the absorption of oxygen by the leaves when drying which causes biochemical changes to the leaves, similar to fermentation. We've all seen oxidation at work when apples turn brown after being sliced. Black teas are completely oxidized before firing, giving them a more wilted look. White tea is picked before the leaf buds have even opened and they are steamed and quickly dried and are, therefore, also unoxidized. Each of these teas has its own benefits for you and your birds.

A note about caffeine: only teas from the Camellia plant contain caffeine. These include green, black, white and oolong. All other teas are considered herbal and are caffeine-free. When herbal teas are mixed with Camellia teas like green or black, you must be sure they have been properly decaffeinated.

Herbal teas originate from plentiful sources of various flowers, leaves, buds, seeds, and other plant components. Each

herbal tea has its own set of health benefits according to its chemical composition. The following is just a sample of tea blends that are used and their potential benefits for you and your birds:

Skin & Feather Quality

It is no secret that many of our birds are living in environments that vary in temperature and humidity much more than their natural, wild habitats. It also should not surprise any of us that some of our birds deal with emotional issues that manifest themselves in a variety of different ways. The condition of the skin and feathers is often our first clue that something may be wrong. For these reasons, we attempt to offer a blend of teas that are not only good for the body but also the mind.

Chamomile is one of our favorites. The flower itself is used to brew this tea and, as many of us know, is very effective in settling digestive upset and calming the nerves. It also has antibiotic properties and relieves muscle spasms. We often use this with birds that are prone to night frights as it acts as a natural sedative and helps eliminate insomnia, anxiety and stress. Thus, we have also seen it help birds that pluck or chew their feathers. Calendula is another favorite whose benefits are well-known. It is actually a flower in the daisy family and contains fair amounts of beta-carotene. It has been used as an anti-inflammatory and antibacterial agent and is great for the skin. In our household, we use it ourselves for sunburn with unbelievable results. It also helps detoxify the body and helps limit the occurrence of digestive problems like ulcers.

Red clover is another great addition to this blend as it can be powerful against skin irritations and speed healing. It has been known to act as an anti-inflammatory and is used to help treat infections, all of which make it useful for feather pickers. Red clover does contain coumestrols which can have blood-thinning properties so it is recommended to

use in smaller amounts. Some bird owners who struggle with feather mutilation have even used this blend topically in a spray bottle so that the bird ingests the tea while preening and the Calendula can work its magic directly on the skin's surface.

Immune System Function

Green tea's properties have been well-established and are frequently in the news. Green tea possesses potent polyphenols, antioxidants found in plants that have amazing benefits that include regulating cholesterol, reducing blood pressure, and aiding weight loss. Professional research journals have cited additional benefits such as preventing gene damage which can lead to cancer, reducing heart disease and decreasing the incidence of stroke. Green tea also helps boost the immune system. Green tea is one of the teas that comes from the Camellia plant and, therefore, contains caffeine. It is vitally important to purchase organic, loose leaf green tea that has been decaffeinated by water or carbon dioxide.

Rose and rose hips are also effective in increasing immune system function as they are high in Vitamin C and bioflavonoids. Hibiscus shares some of the benefits of roses but also aids in moods and depression and helps to expel toxins from the body. Hibiscus, when steeped, results in a rich, red liquid that birds seem to find interesting so hibiscus is often used in blends to entice birds who may be suspicious.

Detoxification

Black tea possesses antioxidants that help maintain healthy blood vessels and promote healthy blood flow. We also use black tea specifically for our soft-bill breeders and pets, like our aracarís, which are prone to iron storage disease as the tannins present in the tea bind to dietary iron and prevent it from being stored in the liver. Many aviculturists use black tea for other iron-sensitive species

like mynahs, starlings, and lorikeets and zoos around the world have seen its benefits for some time. Red rose, rose hips, and hibiscus are also potent blood, liver and kidney tonics, helping to cleanse the body and even help the body recover from fatigue. Dandelion leaf is packed with vitamins and minerals, including the all-important calcium, and aids digestion and liver function.

Much like green tea, dandelion leaf also helps with weight loss in obese birds, an advantage for birds with fatty liver issues. Many veterinarians prescribe Milk thistle with the knowledge that it aids the body in cleansing the liver and is used for the treatment of liver disease. It is also an important addition for the treatment of kidney and bladder problems. When brewing milk thistle, it is the seed that should be steeped in order to release the beneficial components from the tough seed casing.

Digestive Aids

Chamomile, as an anti-inflammatory, serves as a digestive aid by acting as a calming agent. Many people drink chamomile to calm stomach upset and we can extend these benefits to our companion animals. Peppermint is also effective in soothing digestive upset, a reason why mints are offered after meals in restaurants. Peppermint also can mask strange tastes and make your birds more apt to try new things. It has antiseptic properties and contains compounds that are believed to possess antiviral properties as well.

Red, or rooibos, tea is a powerful anti-spasmodic which helps with easing the symptoms of digestive stress like colic and is also rich in minerals. It is known for calming muscle spasms and indigestion as well as possessing anti-allergenic and anti-inflammatory properties. Coriander is another component of this blend as it not only is used to treat digestive disorders but also is an appetite stimulant. Its pungent odor makes it attractive to many and, because the seeds themselves

are brewed, contains important fatty acids like oleic and linolenic acids.

Respiratory Health

Anise seed, or “star anise,” is effective in treating respiratory irritation like bronchitis. It can be used to halt coughing and soothe inflamed airways because of the presence of Shikimic acid, which is also the primary ingredient in products like Tamiflu. With its pungent, licorice-like odor, the entire star-shaped seed pod is brewed to release these powerful components. Rooibos tea is also helpful due, in part, to its anti-spasmodic agents in calming the respiratory system. Red clover is also helpful in calming respiratory irritations, and lavender, due to its essential oils, is effective in relaxing the airways and calming the bird during respiratory stress.

Weight Loss and Fat Oxidation

Many of our birds, who are adapted for long periods of daily activity, tend to get a little overweight in our homes. We can, however, help them to break down these stored fats, or oxidize, so that the fats are more manageable by the body and used for an energy source. Some species are more prone to conditions like fatty liver disease and thus, may be in even greater need of these teas.

First and foremost, green tea is highly effective in oxidizing stored fat. Green tea also increases the good (HDL) cholesterol and decreases the bad (LDL) cholesterol. Jasmine, sometimes referred to as “dragon pearls,” is a flower that is brewed and helps in reducing fat and cholesterol absorption. Hibiscus is also effective in weight loss and helps to maximize optimal digestion.

Hormonal Issues

Raspberry leaf is a tea that all bird owners, especially those with chronic egglayers, should have in their home at all times. Raspberry leaf is an herb that is brewed that helps stimulate muscular contractions. It is for this reason that it

helps women during childbirth and thus, helps birds to pass eggs. It also contains calcium which is another benefit for a bird that is laying, regardless of the situation. It also has been reported that it aids in fertility.

Red clover is also helpful as it contains phytoestrogens that can help balance hormone levels. Coriander is also beneficial because of the many essential oils that are released from the seed when steeped.

Brewing and Offering Tea to Your Birds

When first provided with tea, some birds will be suspicious so it is recommended to start out with weak tea and increase the concentration as they become familiar with it over time. You should always brew tea in hot, but not boiling, water to maximize steeping ability. It is also recommended to make use of a stainless steel mesh tea steeper when brewing tea and to always remove it before serving. It is not recommended to completely replace water with tea, however, so as to avoid dehydration if the bird chooses not to readily accept the tea provided, especially in mixed aviaries where some species may integrate it faster than others.

Some of these items can also be offered dry, especially the flowers. We mix dry flowers like Calendula and roses into dry seed mixes, especially for our smaller birds. There are other ways to glean the benefits of tea as well. When cooking for your bird, it is quite easy to substitute water for tea when preparing egg foods, beans, rice, pasta and other items that are prepared in hot water. Baking is another opportunity to incorporate tea by replacing water with tea in the recipe for bird bread, crumble, muffins or another concoction your birds prefer.

Offering certain teas without steeping them is another option, as small birds love to eat flowers, for example, within their dry food mix. For our soft-bills, we also roll items like chamomile or

calendula flowers into our daily fresh fruit mixture for our birds to increase and diversify the nutritional content of every bite.

The use of tea is yet one more way to incorporate additional items to the diet and increase the amount of vitamins and minerals in your daily regimen.

Teas can also serve as a great enrichment tool, using a different kind each day to keep things interesting. The many methods discussed here will hopefully allow you to provide more diversity in your birds' diets and help your birds to not just survive, but thrive.

For More Reading

- American Friends of Tel-Aviv University (2008). Anti-cancer Flower Power. August 25, 2008. Accessed online March 5, 2008. <http://www.aftau.org/site/News2?page=NewsArticle&cid=7599>
- Chan, PT, Fong, WP, et al (1999). Jasmine green tea epicatechins are hypolipidemic in hamsters (*Mesocricetus auratus*) fed a high fat diet. *J Nutr.* 1999 Jun;129(6):1094-101.
- Chemopreventive efficacy and anti-lipid peroxidative potential of *Jasminum grandiflorum* Linn. - jasmine - on 7,12-dimethylbenz(a)anthracene-induced rat mammary carcinogenesis. *Fundam Clin Pharmacol.* 2005 Dec; 19(6):687-93.
- Cook, Eleanor. *A Reader's Guide to Wallace Stevens.* 2007: Princeton University Press.
- Han C and Xu Y (1989). The effect of Chinese teas on the occurrence of oesophageal tumor caused by N-nitrosomethylbenzylamine in rats. *Zhonghua Yu Fang Yi Xue Za Zhi.* 1989 Mar; 23(2):67-70.
- Kuroda K, Inoue N, et al (2005). Sedative effects of the jasmine tea odor

and (R)-(-)-linalool, one of its major odor components, on autonomic nerve activity and mood states. *Eur J Appl Physiol.* 2005 Oct;95(2-3):107-14.

- Chow, Kit (1990): *All the Tea in China*, China Books & Periodicals Inc.
- Evans, John C. (1992): *Tea in China: The History of China's National Drink*, Greenwood Press. ISBN 0-313-28049-5
- Harler, C.R.: *The Culture and Marketing of Tea.* Second edition. Oxford University Press, New York and Bombay, Reprinted 1958 (First edition 1933, second edition 1956).
- Hobhouse, Henry (2005). *Seeds of Change: Six Plants that Transformed Mankind.* Shoemaker & Hoard. ISBN 1-59376-049-3.
- Kiple, Kenneth F.; Ornelas, Kriemhild Coneè, eds (2000). *The Cambridge World History of Food.* 1. Cambridge: Cambridge University Press.
- Mondal, T.K. (2007). "Tea". in Pua, E.C.; Davey, M.R.. *Biotechnology in Agriculture and Forestry.* 60: Transgenic Crops V. Berlin: Springer. pp. 519-535.
- Moxham, Roy (2003), *Tea: Addiction, Exploitation, and Empire*
- Norwood Pratt, James (2005), *Tea Dictionary*
- Nutrition, CS (Nov-Dec 1999). "Tea and Health". *Nutrition.* 15 (11-12): 946-949.
- Packer, Lester et al (2004): *Herbal and Traditional Medicine: Molecular Aspects of Health*, CRC Press, ISBN 0-8247-5436-0
- Pettigrew, Jane (2002), *A Social History of Tea*
- Yamamoto, T; Kim, M; Juneja, L R (1997). *Chemistry and Applications of Green Tea.* CRC Press.
- Yeruva, L (2008). Delayed cytotoxic effects of methyl jasmonate and cis-jasmonate induced apoptosis in prostate cancer cells. *Cancer Investigations*, November 2008.
- Zhang A, Zhu Qy, et al (1997). Inhibitory effects of jasmine green tea epicatechin isomers on free radical-induced lysis of red blood cells. *Life Sci.* 1997;61(4):383-94.



The Birdie Boutique

AFA members get 10% discount
Use coupon code: *afamember*
Offer expires August 1, 2012
phone 888-442-8426

Largest selection of pet bird supplies, owned and operated by Board certified avian veterinarian.

www.BirdieBoutique.com



Board Certified Avian Veterinarian

Dr. Greg Burkett

Member of the Assoc. of Avian Veterinarians since 1989.

www.TheBirdVet.com



ERGO AUTO BIRD FEEDER

Autobirdfeeder

Electronic Bird Feeder for birds. Provides your pets preset quantity of food at chosen interval, upto 8 times a day. Comes with metal brackets, cover to protect feeder from pets.

- Designed for Breeders and home users
- Dependable for commercial use
- Labor savings for aviculture

Phone : 1-630-543-7686
Fax : 1-866-899-5389
E-mail : support@ergosys.net

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

Ergosys net
ergo systems inc.