

NOVEMBER  
2003

- > Letter from the Editor
- > Letter from the President
- > Desideratum
- > Aloecorp and Industry News
- > Ask Ken
- > Myth or Fact
- > Aloe Science
- > Legal Briefs



## > LETTER FROM THE EDITOR -- BY SUSAN WESTFALL



In last month's *Letter from the Editor* column I expressed my feelings about change, and its subsequent challenges. And I'd still have to say that, for the most part, I find change to be good. Even when we don't necessarily like a particular change, at the very least it often spurs us into action. Action is better than inaction, and to me, stagnancy is deadly.

Many of us have been disturbed by the recent legislative challenges facing the 1994 Dietary Supplement Health and Education Act (DSHEA), in particular relative to Senate Bill No. 722 (S.722). A certain amount of fear has permeated the natural products and dietary supplement industries in this regard, and with good reason. And now, with bio-terrorism regulations being implemented on December 12, 2003, the natural products industry is once again faced with certain obstacles that can affect the bottom line.

Though these sorts of industry changes can cause consternation, the positive aspect is that people are taking a stand and voicing their opinions and concerns. In times of discord, it is refreshing to hear so many people express their viewpoints. And in doing so, positive change is often implemented. Speaking of which, I had the pleasure of attending a small Boulder gathering this week of natural health industry professionals. The event was hosted by Susan Haeger, Global Industry Affairs Director at New Hope Natural Media. The esteemed Loren Israelsen, president of the LDI Group, Inc. (a consulting firm dealing exclusively with dietary supplements, functional foods and phytomedicine issues), was guest speaker.

A long-time industry champion for regulations that benefit the dietary supplement and food and beverage industries, Loren addressed a few key issues facing these industries today, including the imminent implementation of bio-terrorism regulations, and looming DSHEA legislative challenges. Loren spoke of the hurdles our industries can expect to face in 2004, all the while offering hope in the midst of change. Comfortingly, Loren also pointed to the fact that despite all of these challenges, change is good, and provided his valued insight on the potential upside, as well as the downside, of what lies ahead for us in 2004.

This month's *Legal Briefs* column by Patton Boggs attorney Susan Brienza will address in more detail the upcoming bio-terrorism regulations. I would like to extend a very special thank you to Susan for taking the time out of her busy law practice to provide *ALOE TODAY* readers with invaluable insight into the regulatory world of the natural products industry, among others. And thank you, Loren, for continuing to lead such an important charge for a natural "health industry" that is safe, fair and healthy! Lastly, I'd like to welcome the first column contribution for *ALOE TODAY* from Aloecorp's new President & CEO, John Rhees.

To all the readers of *ALOE TODAY*, I join my friends and colleagues at Aloecorp in

wishing you all the best for a loving, peaceful and thankful Thanksgiving holiday. Indeed, despite all of the personal and business challenges that are part of life, I truly believe that we have A LOT to be thankful for! And on that note, I thank all of you for reading *ALOE TODAY*, and for the contributions you continue to make in our wonderful industry.

[<< TOP](#)

---

## > **LETTER FROM THE PRESIDENT**

**-- BY JOHN RHEES**



Having just recently joined the Aloecorp family as President and Chief Executive Officer, I am rapidly beginning to appreciate and understand the power of aloe, and its future potential. For the past twenty years I have been an avid supplement consumer, and knew

about aloe, but did not realize the extent of its currently known benefits. Further, I did not realize how important the naturally occurring bioactive elements are for human health; even more exciting are the yet unknown, yet to be scientifically validated benefits of aloe.

Given this new awareness, I am resolved to do everything possible to grow, harvest, process and package Aloecorp aloe, with the greatest possible care. Our goal at Aloecorp has always been to provide the best aloe products available anywhere in the world, products with the highest quality, potency, nutrient bioactivity, scientific validation, and professional customer care. Since starting with the Company, it has been exciting to see everyone at all levels at Aloecorp so fully committed to customers and the products.

I am pleased to report that during 2004 Aloecorp will be completing new and updated facilities in Mexico and Texas, and new corporate offices in Washington. Our China operations will begin their initial plantings for harvest and processing beginning 2006. All of these facilities will set a new standard in the aloe industry, including state-of-the-art farming, harvesting, processing, and packaging, meeting all levels of certification. The new facilities and processing technologies will provide the finest aloe available anywhere in the world. The potency and naturally occurring bioactivity will be significantly better than previously available. Process and product quality controls will be enhanced with new technologies, updated Good Manufacturing Practices, and our Standard Operating Processes will continue to be of the highest standards in the industry.

With these new technologies and enhanced processing capabilities, we will be offering exciting, newly improved, scientifically validated products. We will be establishing strategic contractual marketing partnerships with our valued Aloecorp distributors, agents and customers, in the design, formulation, sale and use of these new value-added raw materials and products. We are very excited about the future and look forward to working closely with you as these developments occur.

With more people throughout the world seeking healthier food, better personal care products, additional and improved complementary and alternative holistic care,

better pharmaceutical and industrial products, there has never been a better time for all of us to market and sell aloe. Everyone in our industry needs to assume the responsibility of providing efficacious aloe that makes a healthy difference. We believe there has never been a more perfect time to sell aloe for its real benefits, rather than just for label dressing. We believe it is now the right time to take aloe out of its commodity status and elevate it to the status it deserves.

Aloe is a powerful and important botanical whose time has come; the future is full of promise. We appreciate your business and we look forward to new beginnings and strategic partnership with you.

[<< TOP](#)

---

### **> *DESIDERATUM -- BY MICK ANDERSON***

Bio-terrorism is a terrible thing to think about but it is a reality. Now the government is stepping in and manufacturers of consumable products are required to register with the US FDA. The requirement to register is not limited to finished product manufacturers but also to those of us who manufacture ingredients, which are used in food and beverages.



While it is not clear what preventative actions will be taken to insure the safety of our raw materials and, thus, finished food and beverages, it is also the responsibility of all manufacturers to develop safeguards to insure the safety of their products. One of our steps toward that assurance is our ongoing efforts to become ISO 9001 certified. The safety and efficacy of Aloecorp's raw materials are part and parcel of our ISO 9001 effort. We hope to be able to announce in the very near future that we have successfully completed the certification process. With this, Aloecorp will lead the industry as the only ISO 9001 Certified supplier of *Aloe vera* raw materials.

ISO 9001 also requires ongoing discipline. It provides the impetus to be consistent in high quality *Aloe vera* raw materials. It requires efficiencies in every aspect of our business. Every customer and potential customer will benefit from our ISO 9001 status.

As the year draws to a close, I want to personally wish everyone a blessed Thanksgiving holiday. This year I have traveled a great deal throughout Europe and the Pacific Rim countries. Regardless of what we are going through as a country, we are still blessed beyond any other people. Hold your family close to you during this Thanksgiving season and enjoy!

[<< TOP](#)

---

### **> *ALOECORP AND INDUSTRY NEWS* -- BY BOB SMITH**

This past October 17th and 18th the International Aloe Science Council held its annual Scientific Seminar at the Excalibur Hotel in Las Vegas. Mr. Gene Hale, Director of the IASC, once again put together a wonderful two days of informative presentations, entertainment and time to share valuable information with our peers. I for one thought the presentations this year were the best ever.



At the banquet on Saturday evening, two prestigious Aloe Industry awards were presented. First, Mr. Yun Ho Lee was posthumously honored with the IASC Hall of Fame Award. Mr. Lee served as Chairman of the Board of the Namyang Aloe family of companies in Seoul, Korea before his passing November 12, 1996. The award, only one of nine presented to outstanding individuals in the world of aloe by the IASC during its twenty-two year history, was bestowed upon Lee's wife, Korean Senator Helen Chung, in recognition of the significant contributions and advancements made in the worldwide aloe and health industries as a result of Mr. Lee's pioneering vision and commitment to quality. Mr. Lee's passion and vision have accounted for many scientific developments in the world of *Aloe vera*, and he passed that passion and vision on to his son, Mr. B. William Lee, Chairman of the Board of a global "ECONET" family of companies, including Aloecorp, that are committed to the betterment of mankind.

Another award was also presented at the banquet to Dr. Yawei Ni for his research, "Isolation and Characterization of Structural Components of *Aloe vera* L. Leaf Pulp." This award was the 7th annual Yun Ho Lee Award of Scientific Merit, established in 1997 by Mr. B. William Lee in honor of Chairman Lee. Dr. Ni's innovative research helps to better define the components and characteristics of *Aloe vera*'s inner gel, which may aid *Aloe vera* suppliers in developing more refined and controlled methods for its processing. Dr. Ni is an Adjunct Faculty Member of Texas A&M University and research scientist for Carrington Laboratories, Inc. and DelSite Biotechnologies, both of which are located in Irving, TX.

Also at the annual meeting, Aloecorp's Mick Anderson assumed his new role as President of the IASC and Ken Jones, Director of Research and Development at Aloecorp, was elected to the Board of Directors.

Congratulations to all of the aforementioned for their contributions to the *Aloe vera* industry. Without dedicated individuals such as these, our industry would not be where it is today.

[<< TOP](#)

---

[\*\*> ASK KEN -- BY KEN JONES\*\*](#)

One of the more difficult and controversial questions about aloe is whether it is the whole leaf or the gel that is most efficacious in various applications. Common sense would suggest that the whole leaf would contain all of the bioactive potential the *Aloe vera* plant has to offer. On the other hand, much of the



bioactivity of rind components in whole leaf has been attributed to the anthraquinones, which are removed by treatment with activated carbon in most commercial products. The twofold purpose of the activated carbon treatment is to remove aloin (barbaloin), which is a potent laxative, and to help stabilize the color of the product. Unfortunately, this method of treatment is not very specific for aloin and results in the removal of other anthraquinones that have been shown to have direct antibacterial and antiviral activity.

Of course, the polysaccharides in gel products have indirect antibacterial activity via stimulation of the immune system and the subsequent stimulation of phagocytic leukocytes. But this does little to dissuade proponents of whole leaf over gel, and I wouldn't argue that it should, since research has indeed shown that components of the rind have therapeutic value. However, whole leaf has some drawbacks and characteristics that may not be acceptable in many cases. First, to reduce aloin content in whole leaf, significantly more activated carbon treatment must be used than in the processing of gel. So, the innocent bystanders of the inner fillet that have beneficial bioactivity, and some affinity for the activated carbon, are more substantially removed by the decolorization process than in the milder treatment of the gel. And secondly, the color stability of whole leaf is significantly less than that of gel.

Whether our preference is for aloe gel or aloe whole leaf, most of us wish we could retain the direct antibacterial activity of the anthraquinones in our products, and in that respect there is some good news. A March 2003 paper published in the journal of *Antimicrobial Agents and Chemotherapy* reports on work showing direct antibacterial activity from the inner gel of *Aloe vera*, and that is the subject of this month's *ALOE SCIENCE* article. Cheers.

To submit an "Ask Ken" question or to provide comments, send an email to [e-newsletter@aloecorp.com](mailto:e-newsletter@aloecorp.com).

[<< TOP](#)

---

## > **MYTH OR FACT -- BY JEFF BARRIE**

### **Some Facts and Myths About Skin Lotions**

Being a Cosmetic Chemist, many friends and relatives show me a bottle of moisturizing lotion and ask: "Is this a good one for me to use?" My usual answer is: "If you use it, it is a good one

to use." Many people buy lotions only to have them sit on the counter top, under the bathroom sink or in a cabinet somewhere. The main reason we use a moisturizing lotion is to soothe the skin and keep it hydrated. Regardless of price, most products on the market do a good job. So, whatever you use, it is most likely helping.

Consumers should be aware of the two types of lotions available. Occlusives contain oil or silicones that leave a layer on the skin to lock in moisture, while the second, humectants, may be oil-free and are formulated to keep moisture "trapped" in the skin by preventing evaporation. Moisturizers are available in different



consistencies are for dry skin. Of course, there are numerous ingredients found in creams and lotions. In my opinion, *Aloe vera* should be one of them.

A long-time myth regarding skin moisturizers is price. Does the old line “you get what you pay for” really apply to skin moisturizers? Many low-priced products found in the marketplace can be just as effective as their high-priced bothers and sisters. The bottom line comes down to what is in the bottle and how often it is used. Body moisturizers should be used at least once a day, and facial moisturizers should be used morning and night due to routine exposure to the elements.

Another myth is the label copy. A product may have a certain ingredient on the front label in large print but, after reading the entire list of ingredients, a consumer may realize there is not much of that ingredient present in the product after all. In the case of *Aloe vera*, we see this happen way too many times. The front label may have *Aloe vera* written in large letters but, in reality, many times the content of *Aloe vera* in the product is less than one percent! I always suggest checking the ingredient list to make sure *Aloe vera* is no less than fourth on the list; first or second is always preferable.

A good moisturizer should contain other ingredients besides *Aloe vera* and water. Water-binding ingredients, such as glycerin, NaPCA and sorbitol, help keep water in the skin. Emollients work to lubricate the skin. One of the oldest emollients is lanolin, which is obtained from sheep’s wool, and is still in use today. The skin is an organ and, like all organs, it needs vitamins. Vitamin A keeps the elasticity in our skin, while Vitamin B complex helps to repair the tissue. Vitamin C and E are very effective anti-oxidants.

Besides moisturizers, there are other measures to keep our skin looking and feeling healthy. Use a sunscreen if you are out in the sun and best of all avoid any unnecessary exposure to the skin. It still amazes me to see numbers of people sunbathing at a pool or the beach, knowing how bad lying in the sun can be for your skin. Drink plenty of water; stay hydrated, eat properly and avoid contact with harsh chemical skin cleansers.

The fact is that our skin is our most important organ. I’m sure I will get an argument from the gastroenterologists, cardiologists and neurosurgeons of the world, but without our skin, those other organs simply will not function. The fact is that it is easy to care for our skin, and it does not have to be expensive. Choose a moisturizer you feel works for you and “just do it.”

[<< TOP](#)

---

## > ALOE SCIENCE -- BY KEN JONES

In Vitro Susceptibilities of *Shigella flexneri* and *Streptococcus pyogenes* to Inner Gel of *Aloe barbadensis* Miller  
Valerie A. Ferro, Piona Bradbury, Pamela Cameron, et al.  
*Antimicrobial Agents and Chemotherapy*, Mar. 2003



The direct antibacterial activity of aloe has previously been attributed primarily to

this study the inner gel of aloe is shown to have direct antibacterial activity *in vitro* against *Shigella flexneri* and *Streptococcus pyogenes*. It is interesting to note that, in the introduction, the author comments on the tendency of researchers to isolate and analyze individual components of aloe rather than the synergistic effects of the whole plant. Part of the reason for this is that it is very difficult to identify the mechanism of action(s) when several components act synergistically, due to the fact that synergy is oftentimes the result of two or more active constituents acting on the same target activity by different mechanisms of action. So it is a great challenge for researchers to demonstrate the efficacy of aloe as a complex herb, as well as demonstrate empirical evidence of the mechanism of action(s).

The authors were able to show that freeze-dried aloe gel from an undisclosed source (except that it was from the United States) had similar direct antibacterial activity at

225 mg/ml as ampicillin and nalidixic acid at 256 µg/ml. The test sample consisted of the freeze-dried inner gel from plants that were approximately two years old at the time of harvest, reconstituted in phosphate-buffered saline at pH 7.5 and filtered through a 0.22-µm-pore-size filter. The test material was not characterized following filtration and the content of polysaccharides, final pH of the test material nor anthraquinone content were reported. Since direct antibacterial activity has been attributed to anthraquinones, it is surprising that the test material was not analyzed for anthraquinone content. However, later in the paper the authors incorrectly state that, "glycosides of anthraquinones and dihydroxyanthraquinones...are known to be constituents of the inner gel." With that being said, the paper shows that concentrations greater than

112 mg/ml of inner gel, 32 µg/ml of ampicillin and 128 µg/ml of nalidixic acid showed statistically significant growth inhibition of *S. flexneri*. Results of testing on *S. pyogenes* show that the inner gel was even more effective against this organism and was attributed to structural differences between the two organisms. Although there is as much as a thousand times difference in effective concentration of the inner gel compared with pharmaceutical antimicrobial agents in this study, isolation of the active component may provide a significant increase in efficacy.

In conclusion, the authors state that the next stage of testing will involve solvent and aqueous extraction of the inner gel to isolate and identify molecules for further research and development of novel antimicrobial agents in an effort to combat the growing problem of global antibiotic resistance by bacteria, which is of increasing public health concern.

[<< TOP](#)

---

[\*\*> LEGAL BRIEFS -- BY SUSAN D. BRIENZA, ESQ.\*\*](#)

**FDA's Bioterrorism Regulations: Food and Supplement Safety**



Two new FDA regulations go into effect on December 12, 2003, and they directly pertain to both domestic and foreign sellers of *Aloe vera* ingredients and products, and anyone who imports *Aloe vera* into the U.S. In response to 9/11 and concerns for food safety, on June 12, 2002, President Bush signed into law the "Public Health

known as the Bioterrorism Act. In terms of protecting the nation's food supply, the dreaded weapon has changed from the huge aircraft to the microscopic pathogen--equally lethal. This crucial piece of legislation authorizes the Department of Health and Human Services ("HHS") to take specific measures to protect the nation's food and drug supplies against bio-terrorist threats. The Food and Drug Administration ("FDA"), as the primary regulatory arm of HHS for these products, is responsible for implementing those measures.

Title III of the Bioterrorism Act is designed to protect the United States against bio-terrorist threats to its food supply including food from foreign sources. This law has four major provisions:

- Registration of Facilities
- Prior Notice of Imports
- Administrative Detention
- Required Record-keeping

*[...click here to read the whole article](#)*

*(Ms. Brienza is an attorney in the Denver office of the Washington, D.C.-based law firm Patton Boggs LLP. She practices in the area of regulatory compliance, in FDA law (including DSHEA) and FTC law. Her e-mail address is [sbrienza@pattonboggs.com](mailto:sbrienza@pattonboggs.com).)*

---

ACTIValue™ is a registered trademark of Aloecorp, Inc.

The information you read in this e-newsletter is for informational purposes only, and is based on facts and information that the authors believe to be accurate.

To submit comments or questions, send an email to [e-newsletter@newsletter.com](mailto:e-newsletter@newsletter.com).

Due to staff and time constraints all emails will be reviewed, though not necessarily responded to.

Unauthorized reproduction of *ALOE TODAY* without the express written consent of Aloecorp, Inc. is prohibited. To subscribe to this newsletter, send an email to [e-newsletter@newsletter.com](mailto:e-newsletter@newsletter.com) with your name, company name, and email address.

To unsubscribe, simply click [e-newsletter@newsletter.com](mailto:e-newsletter@newsletter.com) and enter "Unsubscribe" in the subject line.