Avocado Toxicity

by Robert Clipsham, D.V.M.
Simi Valley, California

The subject of avocado poisoning has been a tremendous source of controversy and confusion among bird breeders and owners for as long as I can recall, in my practice. This article is to clarify a few of the facts concerning the potential and real dangers of the avocado tree and to summarize the recent scientific literature on the subject.

Traditionally, bird owners have voiced an opinion that avocado fruit may be toxic, yet other owners cite long histories of feeding avocados with no abnormal incidences at all. Several recent articles in the Veterinary journals prompted me to pursue the subject in greater depth.

The avocado, *Persea Americana*, was introduced to California in the 1800s, but was not cultivated extensively until this century. The tree is classified as an evergreen, typical of the group in its biology. Seventy percent of the domestic avocado is the Guatemalan variety, while the remaining percentages include several Mexican varieties, such as Zutano and Fuerte (approx. 20%), and an assortment of about twenty other varieties (3% of the cultivated crop).

There exists a total of 150 varieties of domestic avocado but the two most commonly seen and studied are the Guatemalan and the Mexican varieties. The fruit is seasonal and is an excellent source of energy, primarily as unsaturated fats, minerals, and most vitamins, especially vitamin E. Approximately half the avocados grown in the United States go for human consumption in the form of fresh fruit or processed paste. The remainder is used for a variety of products, including dog food (Avederm) and oil extraction.

The amount of published research on the subject of avocado poisonings in man and animals is quite limited but the fact is that the avocado tree can be toxic as proven by a number of confirmed cases each year.

The parts of the tree containing the toxic chemical are limited to the bark, leaves, and pits. There is no current evidence that the fruit has caused toxicities in any species of animal. Due to the parts of the plant which carry the poison, the most commonly affected animals tend to be horses, cattle and goats; however, cases have been reported in mice, rabbits and birds.

Drying of the plant does not seem to modify the toxin as animals have been poisoned by consuming dried leaves and pits. The nature of the toxin is unknown and conversations with the Department of Environmental Toxicology at U.C. Davis and the Agricultural Extension Department for the University of California revealed that future research will be limited due to lack of funds and the low number of reported animal cases.

The signs most commonly seen after the ingestion of avocado toxin are edema of the throat and chest areas (brisket), congestion of the lungs, and a severe, non-infectious mammary gland inflammation (mastitis) with a marked decrease in milk flow. This pattern of signs does not lend itself to further classification of the toxin by its action.

Obviously, some of these signs have no application for birds, such as mastitis, but the effect of the toxin at high enough levels is to cause lung congestion and this is definitely a common sign in all animals. The ultimate cause of death is lack of oxygen (hypoxia), due to the lung damage.

Interestingly enough, the people of Mexico use the dried leaves of the Mexican varieties in cooking, much as bay leaf or coriander is used in the United States, and no ill effect seems to occur, but, I am told, the amount used is very, very small.

The treatment for the patient found to be suffering from avocado toxicity, is symptomatic and nonspecific, including inducing vomiting and cathartics to eliminate the plant material from the gastro-intestinal tract, followed by the use of oral activated charcoal to absorb any remaining toxin. Shock steroids, oxygen and broncho-dilators may also be necessary in more advanced cases.

On a practical level, it should be advocated not to offer the branches of avocado trees to birds as perches or as chewing devices. Birds should not be caged or flighted under or near avocado trees or groves where falling leaves may lead to serious consequences. The fruit is both safe and nutritious, and may be fed as long as it is washed of potential pesticides and peeled. The pits should be removed when offered to species sufficiently powerful enough to chew into them, such as psittacines.

If the circumstance arises where the possibility of avocado poisoning exists, take your bird to your avian veterinarian as soon as possible and contact either National Poison Control or the Veterinary Poison Center in Urbana, Illinois at the University of Illinois, School of Veterinary Medicine, through your veterinarian for treatment procedures.
WHOLESALE BIRDS

For the Finest Quality of Exotic Birds
At Low — Low Quarantine — Wholesale Prices

Importers of Exotic Birds

Air Shipments to All Parts of the United States and Overseas

Never a Box or Service Charge

BABY AMAZONS

3-6 Months Old
Blue-Front Amazon
Yellow-Nape Amazon
Red-Lored Amazon
Blue Crown Amazon
Spectacled Amazon

MORE BABY BIRDS

African Grey Parrots
Timmeh Grey Parrots
Blue and Gold Macaw
Green Wing Macaw
Sulphur Crested Cockatoo

— And Many Others —

EXOTICS INCLUDE

Troupials
Tanagers
Siskins
Goldfinches
Nightingales
Toucans
Parrots
Lorikeets
— Others —

BABY AMAZONS

3-6 Months Old
Blue-Front Amazon
Yellow-Nape Amazon
Red-Lored Amazon
Blue Crown Amazon
Spectacled Amazon

Always Canaries and Cockatiels

Monthly Sale Specials! — Inquire

SUPREME EXOTIC BIRDS, INC.

39 North Bond St. • Mt. Vernon, New York 10550, USA

(914) 699-4608

Write or Call for Current Price List — Issued Bi-Weekly

As a bird owner or breeder, you're concerned about the health of your pets. You want to make sure that your birds live a long and healthy life.

Your concern is our priority. Knowing that, you'll understand why more people choose USA Wisconsin spray millet than any other grown.

TOP SELLER

At Carlson Specialty Seed, we harvest more spray millet than any producer in the country. Our millet has been developed to meet the tough standards for quality that today's top breeders demand. Such standards are an added benefit for the serious bird owner, and a good reason why Carlson Spray Millet outsells all others.

TOP QUALITY

Test for yourself. You'll find that your birds prefer our quality and freshness. Our customers expect each organically-grown millet spray from Carlson to be as clean and nutritious as nature intended. And they get what they expect . . . finest quality, field fresh millets, sun-ripened and bursting with golden goodness as only Carlson's pesticide-free growing process can produce.

TOP VARIETIES

We're proud of our continuing effort to pioneer new and improved varieties of spray millet for bird fanciers worldwide. In doing so, we offer your birds a diversity in taste they'll love. Carlson's USA Wisconsin Grown pride is your assurance of unequalled quality and nutritional excellence. That's why we state that there is no finer spray millet available in the world today.

For further information, or to find out the name of the Carlson distributor in your area, call or write to Carlson Specialty Seed, Inc. at the address below.

USA WISCONSIN GROWN

Speciality Seed, Inc.
Rt. 2, Box 535, Plainfield, WI 54966
(715) 335-4564