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# NEWSLETTER

WINTER 1991

volume 9, number 4

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## WINTER MEETING SET FOR JANUARY 25, 1992

Ho! Ho! Ho! And what does the LNPS have in its bag for us for the coming year? EXCITING! INFORMATIVE! You've got it, so plan to attend the LNPS's annual winter meeting on January 25th, 1992. The meeting will be at LSU-Alexandria and will start at 9:30 AM and end at 2:30 PM. We'll be having a plant sale, so anyone with plants to donate should bring them, and don't forget to bring cash! LSU-Alexandria is located on Highways 71 and 167 south of Alexandria. The meeting will be in a new building this year - Avoyelles Hall - in Room 118. Just follow the signs once you get to LSU-Alexandria.

Please remember to bring a sack lunch. The nearest restaurant is Lea's in LeCompte, and it really isn't close. Hope to see you all there!

Here's the meeting agenda and information on our speakers:

- 9:30 AM.....Registration and coffee.
- 10:00 AM.....Program by Bill Fontenot - "Creating Habitats on Small Properties":
  - models of ecological restoration techniques.
  - basic elements of a wildlife habitat.
  - inexpensive materials used for habitat creation.
  - wildlife-attracting plants for the deep south.
- 11:00 AM.....Break.
- 11:10 AM.....Program by Robert Poore - "The Sustainable Landscape: A Wholistic Approach to Ecological Design":
  - socio-cultural cycling.
  - matter resource cycling.
  - energy flow.
  - community economic cycling.
  - ecological cycles of nature (or processes of nature).
  - sustainable landscape versus maintenance.
- 12:10 PM.....Lunch, plant and t-shirt sale.
- 1:00 PM.....Business meeting:
  - old business:
    1. update on Hodges Gardens wildflower garden, presented by Amy Burgess.
    2. presentation of new LNPS membership brochure.
    3. discussion of Environmental Issues Committee work.
  - new business: election of new officers.
- 2:30 PM.....Adjourn

## Speaker profiles:

### Bill Fontenot

- \* M.S. Ecology, Northeast Louisiana University.
- \* Curator of Natural Sciences, Lafayette Natural History Museum.
- \* Manager, Acadiana Park Nature Station.
- \* Owner, Prairie Basse Native Plant Nursery.

### Robert F. Poore, ASLA, US-IALE

- \* Landscape Ecologist DBA Native Habitats, Inc. of Flora, Mississippi.
- \* Chairperson of the Environmental Committee of the Mississippi Chapter of The American Society of Landscape Architecture.
- \* Consultant for the Crosby Arboretum and The Mississippi Museum of Natural Science.
- \* Award winning Landscape Ecologist.
- \* Landscape Architect and Artist.

### DUES REMINDER

Don't forget that membership dues for 1992 are due by the first of the year, January 1, 1992! Members who have not paid their dues by April 1, 1990 will be dropped from the roster. Please send your dues (PLEASE NOTE THAT DUES HAVE INCREASED - SEE THE MINUTES OF THE OCTOBER MEETING FURTHER ON IN THIS NEWSLETTER FOR THE DUES APPLICABLE FOR THE VARIOUS MEMBERSHIP CATEGORIES!) to the address below. If you know someone who is interested in joining the LNPS, give them the following address. Make checks payable to the LNPS:

LNPS  
Rt. 1, Box 195  
Saline, Louisiana 71070

### DEADLINES FOR NEXT 4 NEWSLETTERS:

Don't forget! In an effort to better coordinate the distribution of information concerning field trips as well as other dated information the newsletter uses the following deadline policy. Any information received after the deadline will be included in the next newsletter. Deadlines for the next four newsletters are as follows:

Spring Newsletter:	March 1, 1992
Summer Newsletter:	June 1, 1992
Fall Newsletter:	September 1, 1992
Winter Newsletter:	December 1, 1992

### MINUTES OF THE OCTOBER, 1991 MEETING by Beth Erwin

The Louisiana Native Plant Society held its summer meeting and field trip at Briarwood on October 19, 1991. President John Mayronne called the meeting to order. Secretary Beth Erwin read the minutes from the previous meeting. No Treasurer's report was given. A motion was made to change the dues

schedule as follows: Student=\$5.00, Senior Citizen=\$5.00, Individual=\$10.00, Family=\$15.00, Organization=\$25.00, Sustaining=\$50.00, Corporate=\$100.00. It was seconded and passed with a unanimous vote.

A motion was made to accept the brochure sample John presented. It was seconded and passed unanimously.

John went over changes to the proposed 1991 Endangered Plant Species Act.

The society members agreed to subscribe to various forestry organization publications for evaluation by the environmental committee.

Packets of information on the forestry evaluation plan and various articles of interest were passed out to members present.

John asked for suggestions for speakers and topics for the winter meeting. The winter meeting was set for January 25, 1992 at LSU-Alexandria. The meeting was adjourned.

### YOU CAN HAVE YOUR UNKNOWN PLANT IDENTIFIED FREE OF CHARGE

Dr. Charles M. Allen, formerly of LSU-Eunice, has recently joined the faculty of Northeast Louisiana University in Monroe. He is an expert on the grasses of Louisiana and his addition to the herbarium staff at NLU makes the herbarium the center of floristic research in the state. Drs. Thomas and Allen are currently actively working on an atlas of the plants of Louisiana. They would like to know the plants that occur in each of the parishes in the state. If any member of the society, or anyone else, would like to find out what a particular plant is, send it to either Dr. Thomas or Dr. Allen at NLU Herbarium, Dept. of Biology, Northeast Louisiana University, Monroe, La. 71209-0502; phone 318-342-1812. Please press the specimen in a magazine or newspaper and send the dried material to NLU. If possible include enough plant material and label information so that the specimen can be used for a herbarium sheet if desired. If anyone in some other part of the state would like to collect plant specimens to be added to the herbarium's 335,700 specimens, please contact Dr. Thomas and/or Dr. Allen by phone or letter.

### ARE POINSETTIAS AND MISTLETOE DANGEROUS PLANTS TO HAVE AROUND THE HOME AT CHRISTMAS TIME?

by

R. Dale Thomas and Charles M. Allen. The Herbarium, Department of Biology, Northeast Louisiana University, Monroe, Louisiana 71209-0502.

Each Christmas season the local newspaper usually makes some references to the idea that poinsettias and mistletoe are dangerous plants to have around the home. We decided to look at some of the available literature to try to determine just how poisonous we should consider these plants.

Poinsettia, Euphorbia pulcherrima, is a member of the spurge family from Mexico. Its showy red, pink, or white bracts make it a favorite Christmas plant. Mistletoe, Phoradendron serotinum, is a semiparasitic evergreen shrub that grows attached to the limbs of various deciduous trees of the eastern United States. It is commonly used, along with American Holly and other red-berried plants, in our Christmas wreaths and other greenery. It also is used to hang over doorways to allow one to have a holiday kiss when a person stands under the sprig of mistletoe. Since both of these plants are commonly in the same houses with young children, even a hint of their being poisonous is enough cause to be cautious and make sure they are not eaten by children.

Most older texts are more emphatic about Poinsettia being poisonous than are more recent authors. Kingsbury (1964) pointed out that a 2-year-old child in Hawaii died after eating one leaf of poinsettia. Tampion (1977) warned that all spurges ( Euphorbia species) have a milky sap that produces blisters of the skin and gastroenteritis. Stephens (1980) pointed out that the poisonous principles in spurges are not destroyed by drying. Some species cause photosensitization in animals. Lampe and McCann (1985) in the AMA HANDBOOK OF POISONOUS AND INJURIOUS PLANTS pointed out that most spurges contain diterpenes that cause gastritis and other problems. Most incidents of ingestion of poinsettia leaves have been found to produce either no effect (orally or topically) or occasional cases of vomiting. They report no diterpenes in poinsettias. Elis (1975) concluded that although poinsettia has a wide reputation for being a very toxic plant, its reputation is, for the most part not deserved. The validity of the 1919 report of the Hawaiian child eating the poinsettia leaves and dying is now considered to be in doubt. Small children have eaten poinsettia leaves numerous times; some display symptoms; some do not. Sensitive individuals may react to contact with the juice by developing dermatitis. Hill and Folland (1986) pointed out that no well-documented case of severe poisoning exists despite many cases of fruit, bud, and leaf ingestion. Westbrook and Preacher (1986) concluded that poinsettia causes nothing more than minor skin irritation and probably does not deserve the reputation of being very toxic. Fuller and McClintock (1986) reported that of 228 cases of poinsettia ingestion reported to the National Clearinghouse for Poison Control Centers in 1973, the most severe symptoms reported in only 14 cases were a feeling of being unwell and vomiting. Perhaps the most sensible approach is that since most of poinsettia's relatives are poisonous, then one should, as suggested by Hardin (1961) and Hardin and Arena (1969), suspect that it might be poisonous to some people. One should avoid contact with the milky sap and should make every effort to inform children not to eat the poinsettia plants. Any case of ingestion that produces symptoms should be reported to one's physician and to the local poison control center.

Mistletoe, Phoradendron serotinum, presents a different scenario. Because of the folklore associated with the closely related European and Asiatic species of mistletoe, much folklore has also been applied to our species. The genus name comes from the greek for tree thief, referring to its parasitic habit. Its common name is attributed to the German word for dung which is derived from the ancient idea that mistletoe plants appeared on oak trees from bird dung. Tampion (1977) reports that the berries cause poisoning when eaten by children and are attractive and available at Christmas time. One death commonly referred to was of a 28-year old female who made tea of the leaves in order to bring out the start of her menstrual period. She died within 12 hours of drinking the tea. Ellis (1975) reports that all parts of the mistletoe plant poisonous and contain the toxic principles of beta-phenethylamine and tyramine. The toxic substances have a direct affect on the smooth muscle, as well as an indirect action via the adrenergic nervous system. There is stimulation of the vasculature, intestines, urinary bladder and the uterus in females. (The last effect caused ancients to use it, sometimes fatally, as a means of producing abortions.) Symptoms of ingestion include acute gastroenteritis including nausea, vomiting, and diarrhea. Abdominal pain may also be present. Further symptoms may include tachypnea, which may be followed by dyspnea, hypertension, delirium, and possible hallucinations. Mydriasis, sweating, convulsions, and cardiovascular collapse have also been reported. The severe dehydration that may follow profuse vomiting and diarrhea may produce either shock or a shock-like syndrome. Lampe and McCann say that a toxic lectin (toxalbumin) inhibits protein

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synthesis in the intestinal wall but that serious or fatal poisoning is rare. Hill and Folland report that tyramine found in mistletoe is a vasopressor that elevates blood pressure and is classified as an adrenergic chemical. Fuller and McClintock report that plant material of mistletoe will slow the heartbeat similarly to digitalis. Hardin and Arena (1969) quoted the 1597 Herbal of Gerard who described mistletoe as "inwardly taken is mortall, and bringeth most greivous accidents, the toong is inflamed and swolne, the mind is distraughted, the strength of the hart and wits faile." Most poisonous plant lists and most descriptions of poisonous plants include mistletoe. Enough evidence has been collected to cause any parent to be careful with this plant.

Mistletoe has been used as a drug plant for all kinds of ailments. Dobelis (1988) thinks the idea of mistletoe as a panacea and a life-giver can be tied in with the idea that mistletoe was the "golden bough" that allowed one to open the world of the dead and other folk traditions associated with this plant. According to Castleman (1991) we owe the mistletoe's association with kissing to Norse mythology. Balder, god of peace, was slain of an arrow made of mistletoe. His parents restored him and decreed that anyone who passes under mistletoe should receive a kiss as a sign of love. The early Christians believed that mistletoe was a freestanding tree during Jesus's time and that the wood was used to make the cross. God punished the plant for its role in the crucifixion by turning it into a parasite. This story gave the mistletoe its Latin name, *lignun crucis*, wood of the cross, and its French name, *herbe de la croix*. According to Kowalchik and Hylton (1987) mistletoe is used extensively in Europe in medicine and some compounds extracted from it are used to treat certain types of cancer. Even the herbalist Castleman (1991) says mistletoe should not be used without the help of a physician since there is little difference in the amount needed for any medical effect and the amount needed to be toxic. Tyler, in his 1987 *THE NEW HONEST HERBAL, A SENSIBLE GUIDE TO HERBS AND RELATED REMEDIES*, stated "many popular writers on herbs recommend mistletoe tea as a treatment for conditions from anxiety to cancer. Because of the relatively high price of coffee, some persons have even advocated it as a pleasant-tasting substitute. All of the recent scientific studies emphasize the similar toxic nature of plant material, especially the berries but also the leaves, from both American and European mistletoe. So the use of either product as a home remedy or as a beverage should definitely be avoided.

The authors have concluded that mistletoe is a very dangerous plant to have around the home and that all caution should be used to make sure that toddlers and others do not unknowingly ingest any part of the plant, especially the fruits. Poinsettia, although having many dangerous relatives, is not nearly as poisonous or dangerous as is mistletoe. However, poinsettia plants should not be put in the reach of teething toddlers who might chew on any plant.

#### LITERATURE

- Castleman, M. 1991. *The Healing Herbs*. Emmaus, PA: Rodale Press.
- Dobelis, I. N., editor. 1986. *Magic and Medicine of Plants*. Pleasantville, NY: Readers Digest Association.
- Ellis, M. D. 1975. *Dangerous Plants, Snakes, Arthropods, and Marine Life of Texas*. Washington, D.C.: U.S. Department of Health, Education, and Welfare.
- Fuller, T. C. & E. McClintock. 1986. *Poisonous Plants of California*. Berkley, CA: University of California Press.
- Hardin, J. W. 1961. *Poisonous Plants of North Carolina*. Raleigh, N.C: North

- Carolina Experimental Station Bulletin 414.
- Hill, R. J. & D. Folland. 1986. Poisonous Plants of Pennsylvania.  
Harrisburg, PA: Pennsylvania Department of Agriculture.
- Kingsbury, J. M. 1964. Poisonous Plants of the United States. Englewood  
Cliffs, NJ: Prentice-Hall, Inc.
- Kowalchik, C. & W. H. Hylton, editors. 1987. Rodale's Illustrated  
Encyclopedia of Herbs. Emmaus, PA: Rodale Press.
- Lampe, K. F. & M. A. McCann. 1985. AMA Handbook of Poisonous and Injurious  
Plants. Chicago, IL: American Medical Association.
- Stephens, H. A. 1980. Poisonous Plants of the Central United States.  
Lawrence, KN: University of Kansas Press.
- Tampion, J. 1977. Dangerous Plants. New York, NY: Universe Books.
- Tyler, V. E. 1987. The Honest Herbal: A Sensible Guide to Herbs and Related  
Remedies. Philadelphia, PA: George F. Stickley Company.
- Westbrooks, R. G. & J. W. Preacher. 1986. Poisonous Plants of Eastern North  
America. Columbia, SC: University of South Carolina Press.