Exploring for rare plants (including insectivorous ones) in Indo-China, and the challenges of the politics

François Mey

Hosted by The University of Mary Washington and Meadowview Biological Research Station

Thursday, April 21, 6:15—7:15 P.M. at Lee Hall of the University of Mary Washington*, Fredericksburg, VA *partially supported by CARC and the Dept. of Biological Sciences

Saturday, April 23, 12:00 noon. Meadowview Biological Research Station, 8390 Fredericksburg Tnpk., Woodford, VA 22580

Come here this free talk about fascinating plants and people in southeast Asia. This lecture has broad appeal to the local community, plant conservation organizations, hobbyists, and students interested in natural ecosystems and the political complexities of exploration in developing countries.

Note: Seating at Meadowview is limited and reservations are required by April 17 to attend that talk.

Meadowview is located 7 miles north of Bowling Green on route 2 in Caroline County, VA and approximately 12 miles south of Fredericksburg. Directions are available on request or on our web site at www.pitcherplant.org Contact: Dr. Phil Sheridan

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Author:

François Mey was born in Ha-Tien, Vietnam, after his Cambodian parents fled the Khmer Rouge regime. He arrived in France at the age of three, and now teaches French literature in high school. He became seriously interested in carnivorous plants in 2004, and has since intensively studied their systematics and ecology, with a particular focus on the Indochinese Nepenthaceae. François has undertaken extensive field research across Cambodia and Vietnam, and his observations led to the publications of *N. bokorensis* and *N. holdenii*. He produced several botanical diagrams and illustrations for a number of carnivorous plant books and is now, with biologist Jeremy Holden, currently working on a book devoted to the carnivorous plants of Cambodia.

Resume

As a result of past internal and international conflicts, Cambodian borders have long been closed to researchers. It was only in the late 1990s that scientists were able to begin investigating Cambodia's biological diversity in earnest. Thanks to the increased efforts of local and international scientists, Cambodia is now revealing its diverse flora and fauna. Even so, the documentation of biodiversity in Cambodia is still in its infancy and, without doubt, many species remain undescribed. Data on the flora of Cambodia, are particularly scant. The number of plant collections has risen steadily in the past decade, but owing to a lack of research and literature, hundreds of specimens remain unidentified.

Cambodia is the home to several species of carnivorous plants. These attract, capture, kill and digest prey, using modified leaves which act as traps. This group of plants, which is currently composed of approximately 720 species divided among 11 families and 19 genera, is represented in Cambodia by three genera in three different families: the sundews Drosera L. (Droseraceae), the pitcher plants Nepenthes L. (Nepenthaceae) and the bladderworts Utricularia L. (Lentibulariaceae). Carnivorous plants from countries of the Indochinese Peninsula, namely Cambodia, Laos, Thailand and Vietnam, have received little attention from researchers in contrast with those from other parts of the world, such as Australia, the Malesian region, South Africa and the Americas, where many species have been studied and described. The literature on Cambodian carnivorous plants, in particular, is scarce and has not been updated in recent years. The majority of records date back to colonial times, from the end of the 19th century to the early 20th century. Although the spectacular genus Nepenthes has been the subject of several recent papers, only a relatively small part of Cambodian territory has been explored for these plants. As a result, significantly more surveillance work is needed to develop a full understanding of the diversity and the distribution of Nepenthes in Cambodia. In the same fashion, though to a greater extent, the relatively inconspicuous carnivorous plant genera Drosera and Utricularia clearly require further in depth study. Most of the Cambodian carnivorous plants are adapted to the strongly seasonal Indochinese climate which is roughly divided into wet and dry seasons. Indochinese countries are subject to the influence of monsoons with seasonal rainfall patterns. The dry season begins in November or December and lasts until April or May. While most carnivorous plants worldwide occur in relatively wet habitats, species of the Indochinese Peninsula have adapted to conditions of seasonal drought. Four of the five Cambodian species of Nepenthes are regarded as pyrophytes. They have the ability to survive in seasonally dry savannahs or semi-deciduous monsoon forests, prone to dry season fires, by the development of water storage organs in the form of a fleshy rootstock. The carnivorous plants of the two other genera have developed their own ways to survive the Indochinese climate. One of the *Drosera* species, *Drosera peltata* Thunb., produces a tuber, typical of the tuberous Drosera species within the section Ergaleium. The tuber allows the plant to survive the dry season in a dormant state. The other two Cambodian Drosera species, D. indica L. and D. burmanni Vahl, are annual species that endure the drought as seeds. Several of the Utricularia species, including U. caerulea L. and U. bifida L., are also annual species.

The genus *Nepenthes* currently includes 130 species worldwide, with the islands of Borneo and Sumatra, as well as the southern Philippine archipelago, considered to be the *Nepenthes* centers of diversity. They host 36, 37 and 25 species respectively. In comparison, only five species are known from Cambodia and 14 from the four countries of the Indochinese peninsula. Of these, nine species are thought to be so closely related that they have been ascribed to a single group, the *Nepenthes thorelii* aggregate.



Directions

The talk will be held at Lee Hall (map # 24), room 412 with parking possibly available along College Avenue or in the lot adjacent to Chandler Hall (26). Additional parking is available in the parking deck (43), with access from Route 1. The University of Mary Washington is located in Fredericksburg, Va., 50 miles south of Washington, D.C., and 50 miles north of Richmond, Va. To reach the campus from Interstate 95, take Exit 130-A. Follow Route 3 East business to the traffic light for William Street. Make a left at the light. Follow William Street to the next traffic light and make a left onto College Avenue; Chandler Hall parking lot is about half way down the avenue, just past the temporary buildings on your right. To reach the parking deck, continue on College Avenue to the traffic signal and make a right onto U.S. 1. Make the next right, following the signs to the parking deck, which provides free parking for visitors.

For more directions visit http://www.umw.edu/visitors/directions/default.php and map be-low.

