SPECIAL ISSUE – ANNALS OF EVENT
I WORKSHOP OF PLANT BIOLOGY – IB/UNESP

Communications in Plant Sciences (2237-4027)
volume 2, issues 3-4, p.181-181, Jul-Dec, 2012

Phenology and leaf anatomy of *Araucaria angustifolia* in Capão Bonito National Forest

Noel da Silva Oliveira Filho

Faculdade de Tecnologia de Capão Bonito, Capão Bonito, SP, Brazil.

Alessandra Tomaselli Fidelis

Universidade Estadual Paulista, Rio Claro, SP, Brazil.

Aline Redondo Martins*

Faculdade de Tecnologia de Capão Bonito, Capão Bonito, SP, Brazil.

*Corresponding author:
aline_martins_botanica@yahoo.com.br

Workshop Information

I Workshop of Plant Biology (I Workshop de Biologia Vegetal) was held in the Bioscience Institute – UNESP, campus of Rio Claro, Brazil, during August 20 and 21, 2012. Workshop was a scientific event organized by Post-graduate students from that Institute aiming to integrate Post-graduate and Graduate students from different areas related to Plant Biology (Anatomy, Ecology, Evolution, Morphology, Physiology, and transitional areas) from different Universities. Workshop Organization offered a large number of speaking activities, scientific discussions, and extra short-courses to improve the knowledge and formation of students in Plant Biology.

Scientific Committee

Alessandra Tomaselli Fidelis, Anna Carolina Bressan, Daniela de Oliveira Dinato, Diogo Amorim, Elaine Lopes, Letícia Peres Poli Luis Felipe Daibes, Marcelo Claro de Souza, Milene Amâncio Alves Eigenheer, Naiara Lopes de Sousa, Nara Oliveira Vogado, Natalia Costa, Paulo Roberto de Moura Souza Filho, Rafael Marques Guimarães Konopczyk, Rita de Cássia Andreotta, Tiago Haruo Ishibashi, Vitor de Andrade Kamimura, and Yuri Brenn.

Received on August 14, 2012. Accepted on August 21, 2012. Online published on November 14, 2012.

The Capão Bonito National Forest has a total of 1,000 ha of planted forest of *Araucaria angustifolia*, which represents an important source of biodiversity conservation of flora and fauna species associated with this kind of forest. The purpose of this work was to observe the phenology of *A. angustifolia* in Capão Bonito National Forest, thereby determining the amount of male and female trees in this area. Through leaf samples of these two types of trees, it was verified the possible existence of morphological difference between male and female plants by anatomical characters. The monitoring of trees for the phenological establishment was made in specific plots and then the development of its strobilus was observed every month throughout a year. This way, it was determined the number of male and female trees in each plot. After identifying these trees, leaf samples were collected from five male and female trees respectively, to perform the anatomical studies in order to obtain the survey data so that it can indicate whether there are structural differences between the two types of trees. The leaf samples were fixed in FAA 50, dehydrated in ethanol series, embedded in Historesin and the blocks were sectioned at 8-10 μm of thick. The material was stained with toluidine blue and blades mounted in synthetic resin. Photomicrographs of materials prepared on glass slides were obtained from the microscope attached with a video camera. By monitoring the phenological araucarias trees of Capão Bonito National Forest, it was possible to determine the formation of male strobilus from August to December and female strobilus from April to December. All plots had both male and female trees distributed randomly. With respect to the stem diameter it was not observed significant difference between male and female trees. The internal anatomical structure of leaves of male and female trees did not differ significantly when it was considered the thickness of the epidermis, hypodermis and palisade and spongy parenchyma, but there was a tendency of the palisade parenchyma and abaxial hypodermis to be thicker in the leaves of male trees.

Review process and quality of English writing is responsibility of Workshop Scientific Committee.