



ANTHROPOGENIC INFLUENCE ON FOREST CANOPIES

October 24-27

ABSTRACTS



6th International Canopy Conference

Oaxaca City, Mexico

October 24–27

ABSTRACTS

DISTRIBUTION OF TWO SPECIES OF DWARF MISTLETOE IN THE <i>Pinus hartwegii</i> FOREST OF MAGDALENA RIVER BASIN, D. F., MÉXICO. Amabel Paula Hernández Sánchez, Diego R. Pérez Salicrup, Antonio González Rodríguez & Lucía Almeida Leñero	57
ATMOSPHERIC DEPOSITION EFFECTS ON NITROGEN FIXATION IN TROPICAL MONTANE FOREST CANOPIES. Amanda Matson, Marife Corre & Edzo Veldkamp	58
INVENTORY OF THE EPIPHYTIC VASCULAR PLANTS OF THE SAN LORENZO RIVER VALLEY, SAN MIGUEL DEL PUERTO, OAXACA. Ana Ruiz Velasco, Edith Vásquez García & Silvia H. Salas-Morales	59
ANÁLISIS DE DISPERSIÓN DE SEMILLAS DE <i>Quercus castanea</i> NEE, MEDIANTE ANÁLISIS DE PATERNIDAD EN LA CUENCA DE CUITZEO. Ana Laura Pelayo Gómez, Felipe García Oliva, Pablo Cuevas Reyes & Antonio González Rodríguez	60
NEOTROPICAL FLOWERING EPIPHYTE DIVERSITY: WHERE IS IT? Ángela Nivia-Ruiz & Alfredo Cascante-Marín	61
PATTERNS OF LEAF MORPHOLOGY, HERBIVORY AND FLUCTUATING ASYMMETRY IN TWO-HYBRID COMPLEX OF <i>Quercus</i> IN MÉXICO. Armando Canché Delgado, Antonio González-Rodríguez & Pablo Cuevas-Reyes	62
DOES TREE STRUCTURE AFFECT THE SPATIAL PROXIMITY OF SPIDER MONKEYS DURING FORAGING? Braulio Pinacho-Guendulain & Gabriel Ramos-Fernández	63
NOVEL METHODS FOR HORIZONTAL MOVEMENT IN FOREST CANOPIES: ACCESS TO OUTER CROWNS AND OPEN SPACES FOR CANOPY RESEARCH. Brian A. French, Richard W. Koomjian & David L. Anderson	64
PHENOTYPIC VARIATION BETWEEN AND WITHIN WILD POPULATIONS OF A BROMELIAD EPIPHYTE: <i>Tillandsia carlos-bankii</i> . C. Fernández-Ríos, J. L. Chávez-Servia, P. Antonio-López & D. Mondragón-Chaparro	65
DIVERSITY OF AMPHIBIAN AND REPTILES OF THE CANOPY IN THE RAINFOREST OF LOS TUXTLAS, VERACRUZ. Carlos Omar Becerra Soria & Víctor Hugo Reynoso	66
<i>Tillandsia imperialis</i> (BROMELIACEAE) AS A REFUGE OF COLLEMBOLA IN CLOUD FOREST HIDALGO STATE, AND DISCOVERY OF A NEW <i>Sminthurinus</i> . Claudia T. Hornung-Leoni & José G. Palacios-Vargas	67
EFFECT OF OAK HOST PLANT GENETIC DIVERSITY ON CANOPY ARTHROPOD COMMUNITY STRUCTURE IN CENTRAL MEXICO. Efraín Tovar-Sánchez, Leticia Valencia-Cuevas, Patricia Mussali-Galante & Guadalupe Rangel Altamirano	68
INFLUENCE OF OAK HOST SPECIES GENETIC DIVERSITY LEVELS ON CANOPY ARTHROPOD COMMUNITY STRUCTURE IN THE MEXICAN VALLEY. Elgar Castillo-Mendoza, Leticia Valencia-Cuevas, Patricia Mussali-Galante & Efraín Tovar-Sánchez	69
THE CANOPY OF TEMPERATE FOREST AS WATER STORAGE OF RAINFALL INTERCEPTION. Eulogio Flores-Ayala, Enrique Buendía-Rodríguez, Fernando Carrillo-Anzures & Tomás Pineda-Ojeda	70
DO EPIPHYTES FUNCTION AS REFUGIA OF SPIDER DIVERSITY IN SHADE COFFEE PLANTATIONS? Francisco Emmanuel Méndez-Castro & Dinesh Rao	71
RESERVOIR AND INCORPORATION OF NUTRIENTS OF ABOVEGROUND BIOMASS OF <i>Pinus patula</i> Schltdl. et Cham. UNDER THINNING. Gerardo Rodríguez-Ortiz, Armando Gómez-Guerrero, Víctor A. González-Hernández, Héctor M. de Los Santos-Posadas, Arnulfo Aldrete & Aurelio M. Fierros-González	72
PREVALENCE AND FUNCTIONAL RELEVANCE OF HETEROBLASTY IN EPIPHYTIC BROMELIADS. Kerstin Meisner & Gerhard Zotz	73
LONG-TERM DYNAMICS OF VASCULAR EPIPHYTES, A 10 YEARS OBSERVATIONAL STUDY IN A LOWLAND RAINFOREST. Glenda Mendieta-Leiva, Katrin Wagner & Gerhard Zotz	74
INFLUENCE OF FOREST TYPE AND GENETIC DIVERSITY OF HOST PLANT ON CANOPY ARTHROPOD COMMUNITY STRUCTURE OF <i>Quercus crassifolia</i> . Guadalupe Rangel Altamirano, Enrique Ruiz-Cancino, Leticia Valencia-Cuevas & Efraín Tovar-Sánchez	75
EFFECT OF HYBRIDIZATION OF THE <i>Quercus crassipes</i> × <i>Q. crassifolia</i> COMPLEX ON THE COMMUNITY STRUCTURE OF ACORN DRILLING INSECTS. Guillermo Iván Sánchez Arellano, Angélica Corona López, Víctor Toledo Hernández, Laura Márquez Valdelamar & Efraín Tovar Sánchez	76



6th International Canopy Conference

Oaxaca City, Mexico

October 24–27

ABSTRACTS

DOES TREE STRUCTURE AFFECT THE SPATIAL PROXIMITY OF SPIDER MONKEYS DURING FORAGING?

Braulio Pinacho-Guendulain* & Gabriel Ramos-Fernández

Centro Interdisciplinario de Investigación para el Desarrollo Integral Regional Unidad Oaxaca, Instituto Politécnico Nacional. 71230 Santa Cruz Xoxocotlán, Oaxaca, México.*Email: pinachogso@gmail.com

Feeding competition depends on spatial proximity between foraging individuals, which could in turn depend on the structure of foraging patches. We explore this possibility using scan samples of subgroups of spider monkeys ($N = 584$ samples) foraging on six different species of trees that differ in their structure. We estimated spatial proximity as the distance separating the two farthestmost individuals in the subgroup (dispersion), and as the mean inter-individual distance for all individuals in the subgroup (mean distance). A one-way ANOVA showed significant differences in both measures of spatial proximity (dispersion: $F = 6.3$, $p = 0.000$; mean distance: $F = 4.4$, $p = 0.001$). Results of the post-hoc Tukey test showed no difference between the size of subgroups foraging on *Enterolobium cyclocarpum* than those foraging on the rest of species. However, we found spatial proximity to be lower in *E. cyclocarpum* than on *Ficus* spp. (dispersion: $T = 14.4$, $p = 0.001$; mean distance: $T = 7.8$, $p = 0.001$) and higher in *Brosimum alicastrum* ($T = 11.6$, $p = 0.007$). Spatial proximity on *Guazuma ulmifolia* trees does not differ from that on other species, while in *Oxandra lanceolata* only subgroup dispersion was significantly higher than that observed in *Ficus* spp. ($T = 5.6$, $p = 0.043$) in spite of having similar sized subgroups ($T = 0.788$, $p = 0.124$). These results suggest that spatial proximity could be lower in trees with open canopies, although it remains to be explained why subgroups are more cohesive in *Ficus* spp. than in *Brosimum*. Also, it is necessary to consider quantitative measures of canopy structure. CONACyT J51278 – Instituto Politécnico Nacional.