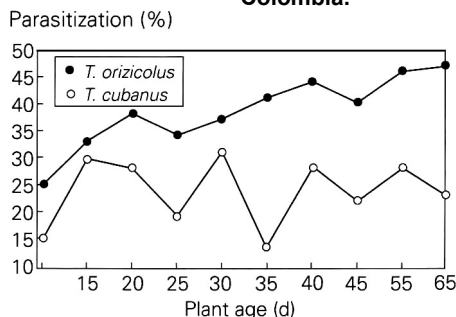


## Parasitization of *Tagosodes orizicolus* and *T. cubanus* in northeastern Colombian ricefields

M. Arias and M. Vivas, Universidad de Francisco de Paula Santander, Cúcuta; A. Cuevas, FEDEARROZ, Av. 4, No. 71\1-75, Cúcuta; and A. Pantoja, Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia (present address: Department of Crop Protection, University of Puerto Rico, P.O. Box 21360, Rio Piedras 00928, Puerto Rico)

Biological control of pests in integrated pest management (IPM) programs requires precise information on occurrence and effectiveness of natural enemies in attacking the pests. We studied *T. orizicolus* and *T. cubanus* parasitization in commercial irrigated ricefields at five locations representative of rice-growing areas of Norte de Santander Department, Colombia. On each farm, a field was selected at planting time and sampled at randomly selected sites every 7 d. A sample consisted of 40 sweeps taken in 20 sites/field. A sweep was a stroke with the net in either direction; one sweep was taken with every forward step. Samples were placed in plastic bags and brought to the laboratory for study. *Tugosodes* spp. were selected, sorted by species, and examined for evidence of parasitization by *Elenchus* sp. (Strepsiptera:Elenchidae).

**Parasitization percentage for *T. orizicolus* and *T. cubanus* in ricefields. Norte de Santander, Colombia.**



## Analysis of weighted-least-squares estimates for probability of parasitization of *T. orizicolus* and *T. cubanus* in ricefields. Norte de Santander, Colombia.

Parameter	Estimate	Estimated SE	$\chi^2$	P
Intercept	0.2500	0.0086	851.62	0.0001
Plant age	0.0018	0.0003	31.60	0.0001
Species	0.0198	0.0086	5.32	0.0211
Plant age x species	0.0018	0.0003	31.32	0.0001

Data were subjected to analysis of variance. Percent parasitization was calculated for each species. We used a linear model for repeated measurement analysis (PROC CATMOD, SAS) to calculate the probability of parasitization for each species and plant age.

Significant differences in parasitization at each plant age and for species were found (see table). Plant age  $\times$  species interaction was significant, indicating each species responds differently, to parasitoid attacks and percentage of

parasitism depends on plant age. The probability of parasitization (PP) was estimated as

$$T. orizicolus \text{ PP} = (0.00190) (\text{plant age})$$

$$T. cubanus \text{ PP} = (-0.00180) (\text{plant age})$$

PP for *T. orizicolus* increases with plant age while that for *T. cubanus* is not affected (see figure). This information will be useful to define IPM strategies for *T. orizicolus* and to help understand the effect of natural enemies in controlling *T. orizicolus* populations. ■

## *Hydrellia wirthi* Korytkowski: a new rice pest in Colombia

A. Pantoja and A. Salazar, Centro Internacional de Agricultura Tropical, A. A. 6713, Cali, Colombia

In Valle del Cauca Department, Colombia, *Hydrellia grisea* (F.) is a sporadic rice pest. Farmers usually apply carbofuran at planting to prevent seedling damage. A pyrethroid combined with a herbicide is applied later. In spite of this frequent insecticide use, little is known about the pest's biology in Colombia.

*Hydrellia* larvae and pupae were collected in the field. Individual pupae were placed on a petri dish in the laboratory. As adults emerged, they were placed in alcohol. Samples of larvae, pupae, and adults were identified at IIRI as *Hydrellia wirthi* Korytkowski. This is the first report of the pest in rice in Colombia. *H. griseola* was not recovered in the study.

Whether *H. wirthi* causes damage and affects yield as *H. griseola* does is not known. Action thresholds for use in integrated pest management in Colombia need to be reviewed for *H. griseola* and established for *H. wirthi*. ■

## Colombian ricefield spiders

H. Bastidas and A. Pantola, Rice Program, Centro Internacional de Agricultura Tropical, A. A. 6713, Cali, I. Zuluaga, Universidad Nacional, Facultad de Ciencias Agropecuarias, Palmira; and A. Murillo, Hoechst Colombiana, Bogota, Colombia

Little is known about the role of spiders in controlling insect pests of rice in Latin America.

Reports have been conflicting on number and taxonomic identity of spider species in Colombian ricefields. This study aimed to identify the spider specimens in commercial irrigated ricefields in Valle del Cauca Department, Colombia. Spiders were collected with a standard sweep net, although some species were collected with an aspirator. Sampling started 5 d after panicle emergence; fields were sampled weekly