



Distribution and head morphology of 12 phytophagous ephydrid flies on rice in the Philippines. Numbers refer to species in table. □ = rainfed wetland, Δ = irrigated lowland, • = irrigated rice terraces. Scale = 1 mm except for nos. 2, 4, 13, 14, 15, and 16.

and irrigated lowlands. *Brachydeutera* was found in the terraces.

*Hydrellia philippina* was most common in irrigated lowlands, *Psilopa* spp. in rainfed lowlands, and *H. griseola* in terraces. This fly is commonly called rice leaf miner and has limited distribution in temperate zones.

including the USA, Europe, North Africa, Japan, and Korea.

*Notiphila laligenis* and *N. similis* were numerous on emergent vegetation and usually laid eggs on the stem of the perennial fern *Marsilea minuta* L. The eggs were an alternate host of the stem borer egg parasite *Trichogramma*.

*Discomyza maculipennis* (Weidemann) is a scavenger and emerged from dead *Lymnaea* and *Pila* snails.

Ephydrid flies are generally beneficial, and provide food for spiders, toads and frogs, and wildlife that inhabit rice fields and marshes. ♀

### Whitebacked planthopper (WBPH) attack in Assam, India

N. N. Saha, Upgraded Gram Sevak Training Centre, Arunachal, Cachar, Assam, India  
WBPH *Sogatella furcifera* (Horvith)

seriously damaged rice for the first time in Assam in May-June 1985. More than 8,000 ha in Cachar and Karimganj Districts of the Barak Valley were hopperburned. Infestations also were reported in Sibsagar and Jorhat Districts of the Bramaputra Valley.

In Barak Valley, high yielding Krishna, Cauvery, Jaya, and IR8 were more severely infested than local cultivars. WBPH first attacked nursery seedlings and then newly transplanted rice. Infested plants turned yellow and then rust red. Brown spots appeared at

feeding sites. Plants were stunted, and severely infested plants died. Sweep net (0.4 m diam, 0.5 m long) samples from highly infested fields in Raipur, Choto Jalenga, Duarbond, and Hailakandi had 800-1,400 hoppers/sweep.

Large WBPH populations were

accompanied by high rainfall in early Apr, followed by a prolonged dry period with high temperature and humidity in May. Heavy rainfall in early Jun reduced populations.

Seedlings treated with granular carbofuran 3 G or phorate 10 G at 1 g

ai/ha were free from WBPH. Spraying infested nursery seedlings with chlorpyrifos 20 EC, fenitrothion 50 EC, and phosphamidon 100 EC at 0.5 kg ai/ha also effectively controlled the pest. *J*

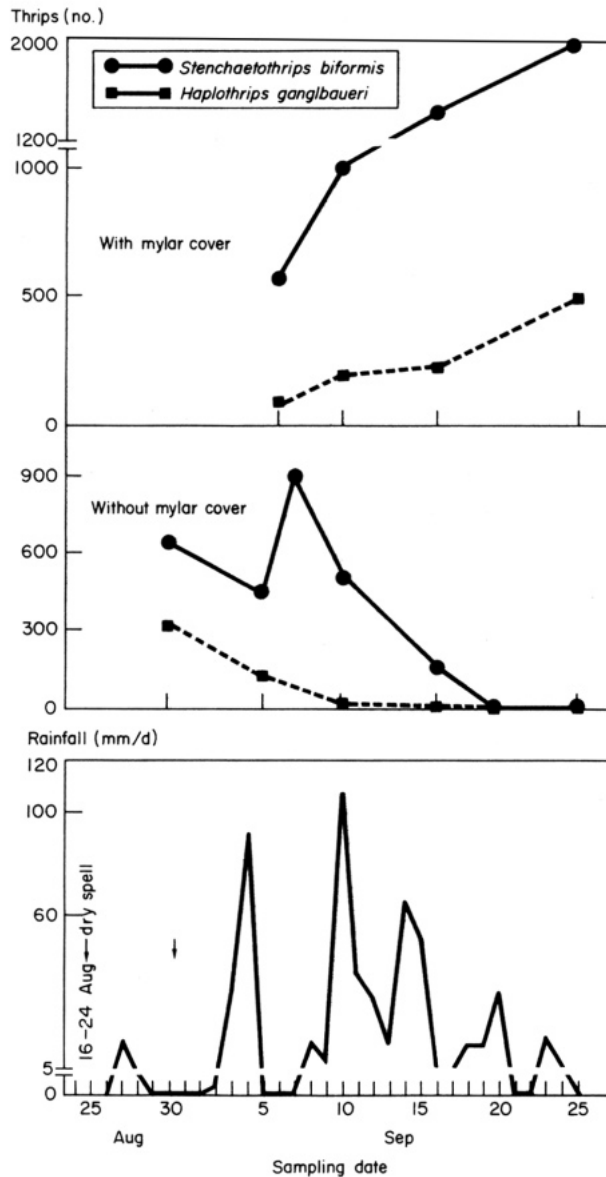
### Effect of heavy rains on rice thrips

A. T. Barrion and J.A. Litsinger, IRRI

A slash-and-burn upland rice site in Siniloan, Laguna, Philippines, has regular high rainfall in Aug and Sep. An unusually dry spell in Aug 1985 affected the vegetative plants. Thrips settled on rice and the lack of rainfall favored their rapid multiplication in less than 2 wk. Thrips and water stress caused the rice leaves to roll and be partially dried.

Two thrips — *Stenchaetothrips biformis* (Bagnall) and *Haplothrips ganglbaueri* Schmut — were isolated from the damaged leaves. *S. biformis* was found only in rice. *H. ganglbaueri*, in contrast, was common in cogon grass but rare in rice. The larvae and adults of both species fed inside the rolled leaves, causing stippling damage to the leaf tissue.

In anticipation of a heavy rain, 16 thrips-infested hills of rice and the same number for cogon were covered with 10 × 64-cm cylindrical mylar cages provided with side vents. Thrips populations were counted before and after the rain on uncovered plants (n = 25 rolled leaves/sampling date) and covered plants (n = 4 hills/sampling date). During the drought period, initial *H. ganglbaueri* population was high (300 individuals per 4 hills). This was subsequently reduced to 100 after the first heavy rain on 3-4 Sep and a 2-wk continuous downpour on 8-24 Sep. *S. biformis* population likewise declined from 600 to 400 under the same weather conditions. In contrast, there was a population buildup inside the cages for both species — *S. biformis* increased from 500 to 2000 individuals and *H. ganglbaueri* swelled from 90 to 500 (see figure). Heavy rainfall, therefore, is a natural mortality factor against thrips. *J*



Effect of rainfall on grass thrips (rice: ●—●; cogon; ■—■) in Siniloan, Laguna, Philippines, 24 Aug-25 Sep 1985.

### Flea beetle *Chaetocnema basalis* (Baly) (Coleoptera: Chrysomelidae), a pest of slash-and-burn upland rice in the Philippines

A. T. Barrion and J.A. Litsinger, Entomology Department, IRRI

*Chaetocnema* spp. are common upland rice pests extending 40° N and S of the

equator in Africa, Latin America, and Asia. *C. pulla* Chapuis transmits rice yellow mottle virus in Kenya. *C. concinnipennis* Baly in India and *C. denticulata* Stephens in Latin America cause foliage damage similar to that caused by rice hispa *Dicladispa armigera* (Olivier), but vector no disease. In the Philippines, *C. (Tlanoma)*