plants is minimal (5). The frego bract trait would also be useful in a trap crop situation (1). However, frego bract confers increased sensitivity to *Lygus* spp. (9), a factor that would be mitigated to some extent by the nectarless trait in La. 850082FN (10).

Fiber length and strength of La. 850082FN have been consistently lower than Deltapine 41; micronaire reading has been similar to that cultivar (2). Fiber length, strength, and micronaire of La. 850075FHG have been similar to Deltapine 41. Measurement of total seed gossypol by the aniline reaction method indicated that gossypol level in La. 850082FN was 95% of that in Deltapine 41 and 49% of La. Hg-660 (6); gossypol level in La. 850075FHG was 150% of that in Deltapine 41, and 76% of La. HG-660.

The germplasm lines La. 850082FN and La. 850075FHG provide significant levels of resistance to two key cotton insect pests, and have good lint-yielding ability. These lines should be useful to cotton breeders attempting to develop insect resistant cultivars.

Seed (25 g) of these lines is available for distribution to scientists upon written request to W. David Caldwell, Red River Res. Stn., P.O. Box 8550, Bossier City, LA 71113.

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**Registration of ICZ3 and ICZ4 Maize Germplasms with Resistance to Spotted Stem-Borer *Chilo partellus* (Swinhoe)**

ICZ3 (Reg. no. GP-246, PI 570679) and ICZ4 (Reg. no. GP-247, PI 570680) maize germplasms were developed as IC-90-W1 and IC-90-Y1, respectively, for resistance to the stem borer *Chilo partellus* (Swinhoe), by the Crop Pests Research Program of the International Centre of Insect Physiology and Ecology (ICIPE), Kenya.

To develop the germplasms, plants from the highly resistant inbred Mp704 (1,2) were crossed with *S* selections from ICZ1-CM, ICZ2-CM (ICIPE-CIMMYT), Poza Rica 7832, MBR 8637 (CIMMYT), MMV 400 (Zambia), Katumani Comp. B, H511 and H512 (Kenya) maize genotypes having varying levels of resistance (3,4) to *C. partellus* infestation. Plants resulting from the crosses were selfed and progenies were selected for resistance under artificial infestation. Kernels from selfed and selected plants were subsequently separated along color lines and recombined to form EV-90-W1 white and EV-90-Y1, yellow germplasms.

After three cycles of recurrent phenotypic selection by artificially infesting ~2000 plants with larvae of *C. partellus*, selfing, and later recombining individuals having foliar lesion of ≤3, the experimental materials were renamed IC-90-W1 and IC-90-Y1, respectively.

Mean foliar lesion rating of ICZ3 in trials across six environments under artificial infestation with 30 first instar larvae per plant was 2.96 (on a scale of 1 = resistant to 9 = susceptible), while that for ICZ4 was 2.39. Percent deadheart (obtained as the proportion of plants showing the symptom per plot), was 0.65 and 0.98, while stem tunnelling (estimated as the actual length tunneled relative to plant height) was 22.06 and 18.12% for ICZ3 and ICZ4, respectively. ICZ4 had a higher level of resistance to both leaf feeding and stem tunnelling than ICZ3. For foliar lesion, deadheart and stem tunnelling, Mp704, the resistant check, had values of 1.80, 0.10, and 12.17%, respectively, while H511, the susceptible check had values of 7.24, 30.49 and 35.68%. Grain yield of ICZ3 is ~1.4 t·ha⁻¹ with 53 d to 50% silking and plant height of 195 cm. ICZ3 tends to be prolific. ICZ4 gives a grain yield of ~6.5 t·ha⁻¹ and is relatively taller (220 cm), with 58 d to 50% silking and a tendency to be prolific (although the second ears are often not well formed). These yield data compared favorably with the susceptible commercial check, H511, with grain yield of 6.9 t·ha⁻¹, 65 d to silking, and height of 265 cm in the same trials. Mp704, being an inbred, was not considered for yield comparisons.

Seed requests should be addressed to Program Leader, Crop Pests Research Program, ICIPE, P.O. Box 30772, Nairobi, Kenya. Appropriate recognition of the source should be acknowledged when ICZ3 or ICZ4 contribute to development of new cultivars, hybrids or germplasms.

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**References and Notes**


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