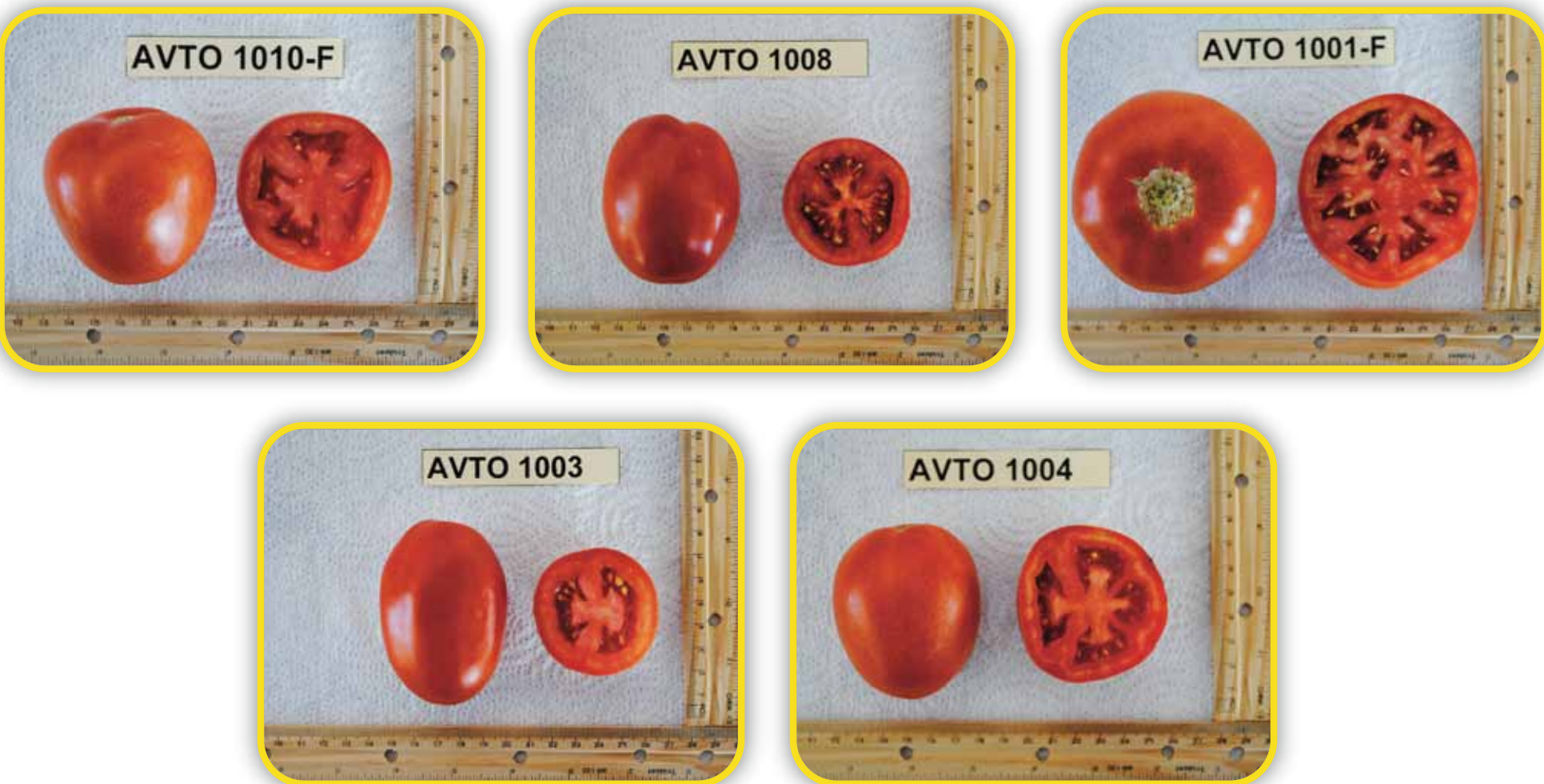


Project Seeds of Hope: Field evaluation and multiplication of tomato cultivars developed by AVRDC in Honduras

F. J. Díaz, Horticulture Program, FHIA (javier_diaz@fhia-hn.org) J. Nienhuis, University of Wisconsin, Madison (nienhuis@wisc.edu)

Abstract

After two years of multiple evaluations, a final group of five cultivars of tomato developed by the AVRDC in Taiwan were evaluated in two environments: mega-tunnel and open field at CEDEH-FHIA in Honduras during the 2012-2013 season. Results indicated that the selected cultivars are well adapted to local conditions, and commercial yield under protected conditions incremented the yield in 29.6 %. All cultivars showed good tolerance to viruses.



Cooperative: El Ocotillo

Three cultivars (1003, 1004 and 1008) were selected for evaluation with a group of 18 growers (16 males and 2 females) at El Ocotillo, Fco. Morazán. The selected cultivars plus five others from the PRIICA project and 1 Control (cv. Pony Express) were planted inside a mega-tunnel to evaluate its performance and yield, and posteriorly if selected, to extract seeds that will be used later in new plantings by the growers.

Training

Basic training on seedling production, crop establishment, IPM, harvest and seed extraction was given to growers in January/14.



Table 1. Commercial yield of five tomato cultivars produced in mega-tunnel and open field conditions. CEDEH-FHIA, Honduras. 2013.

Ambient	Commercial yield (kg.ha ⁻¹)	Increment (%)
Mega Tunnel	68,841 a	29.6
Open Field	53,117 b	---
CV (%)	19.56	
R ²	0.72	
p-value	0.0023	

* Means followed by different letter are statistically different according to LSD test (p ≤ 0.05).

Table 2. Mean fruit weight of five tomato cultivars produced at CEDEH-FHIA, Honduras. 2013.

Cultivar	Mean fruit weight (g)
AVTO 1001-F	112.5 a
AVTO 1010-F	90.2
AVTO 1004-F	76.0 c
AVTO 1003-F	73.0 c d
AVTO 1008-F	60.3 d
CV (%)	13.75
R ²	0.88
p-value	0.0001

* Means followed by different letter are statistically different according to LSD test (p ≤ 0.05).

Field day

On March/14, the different cultivars of tomato were harvested and presented in a field day to local growers and authorities.



Comments

- Results in yield and fruit quality by the AVRDC cultivars do not exceed those of the Control.
- Further evaluations will be necessary to adjust management by growers, since it was their first experience producing under protected conditions.