

Semillas de Esperanza

A
HortCRSP
project



Jim Nienhuis
Dept. of Horticulture
UW-Madison

CARE billboard in LA airport

I am Powerful

She can plant the seeds of change.
If she can get the seed.

As women in Africa gain the right to own land, it changes more than their lives. It changes countries. Yet, if they can't get credit to buy property or seed, or get their crops to market, their dreams remain dreams. That's why CARE is working to accelerate access to basic financial services. Now is the time for action. She has the power to change her world. You have the power to help her do it. Visit us at WWW.CARE.ORG

 **care**
Defending dignity.
Fighting poverty.

Where exactly does she get the seed?

Our goal – cultivars and seed adapted to small-scale low-input rural agriculture



- Seeds are often very expensive \$0.15 -0.25/seed!!

GOALS: Semillas de Esperanza

I. Work with women's groups to develop vegetable production and marketing as a business through improved cultivars.

II. Develop seed production and marketing as a high value business specifically for women's groups and cooperatives

*** Knowledge, Technology, hands-on experience**

Collaborators / Partners

- World Vegetable Center – Taiwan ROC
 - Guatemala - CARE
 - El Salvador - CARE
 - Honduras – FHIA
 - Nicaragua - UNA
 - Costa Rica – ITCR (at their own expense!)
- 

Activities to achieve goals

- Evaluate virus resistant germplasm
 - hundreds of accessions, dozens
- Training of regional trials
 - regional and international workshops and local field days
- Organize field days for communities and women's groups

I Regional Workshops

Four – train community and partner leaders (120)

- * Evaluation
- * Marketing
- * Greenhouse
- * Post harvest
- * Seed technology



Honduras

Vegetable market - Nicaragua



Nicaragua workshop on vegetable seeds



Victor Cabrera
Ag.
Economist

‘need a
business plan’

Javier Diaz

'Vegetable guy' of FHIA - Honduras



Produce seeds in Greenhouses



Tomas Laguna in greenhouses in Nicaragua

Jaime

El Gran Verdulero del Norte



II. Field Days with growers and community leaders



Martha,
Evaluating
'Semillas de
Esperanza'
tomatoes in
Tisma,
Nicaragua

Field days – FHIA Honduras



Javier teaching us in the field

Field days – FHIA Honduras



Javier teaching our class

Jaime – leading a discussion Tajumulco - Guatemala



Working with Women's groups



Multiplier
Effect

3,000 single
mothers

The mother load of gender equity - Tajumulco

Workshop – Univ. of Wisconsin



10 –day hands-on workshops
Three – over 100 participants

“Produccion y mercadeo de Hortalizas”

Workshop – Univ. of Wisconsin



Vegetable farms in Wisconsin

Workshop – Univ. of Wisconsin



Farmers markets

Workshop – Univ. of Wisconsin



UW dorms and picnics

Vermont Valley Farm



Visit organic farms, how do they do it

“CRSPis” at workshop



Crspis with our Guatemalan ladies

Workshop on business management



33 participants!!! Many paid their own way!

John at UW workshop on business management



Explaining
Feed the
Future

John and ladies at vegetable market



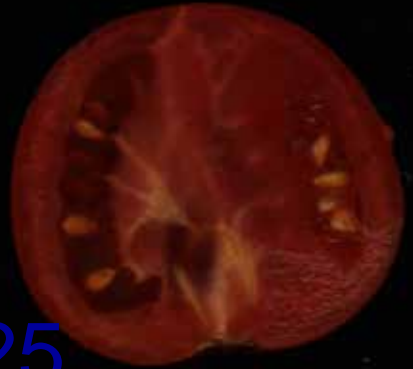
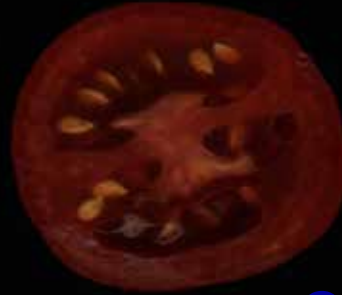
Part of workshop on business management

Results - Impacts

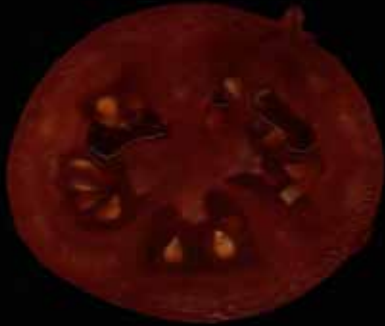
- **Identified tomato cultivars with virus resistance desirable market characteristics**
- **The cultivars (and seedlings) are being produced and sold by women's groups in :**
 - El Salvador**
 - Nicaragua**
 - Honduras**
 - Guatemala**



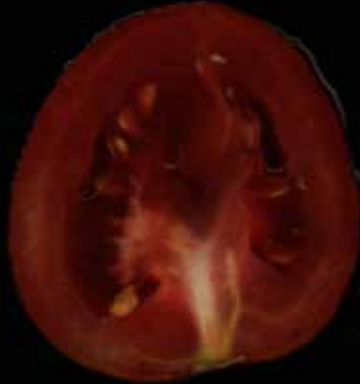
312



3125



307



307



Pon



Butt



AVRDC tomato line AVTP1004 foreground vs
susceptible commercial hybrid Botero



The germplasm
from AVRDC
is a success!

Congratulations
To AVRDC and
their breeder
Peter Hanson

Tisma tomato trial: Left-to-right:
Hanson, Vidal Marin, Tisma farmer, Jannette Gutierrez



Peter
Hanson of
AVRDC
Visiting
Trial in
Tisma,
Nicaragua

Womans vegetable Cooperative



Doña Filomena

Dinamba, Nicaragua

Working with Women's groups



Ladies with their first harvest tajomulco, Guatemala

Building a greenhouse to produce seed Tajomulco - Guatemala



Javier with women's group in Honduras - siguatepeque

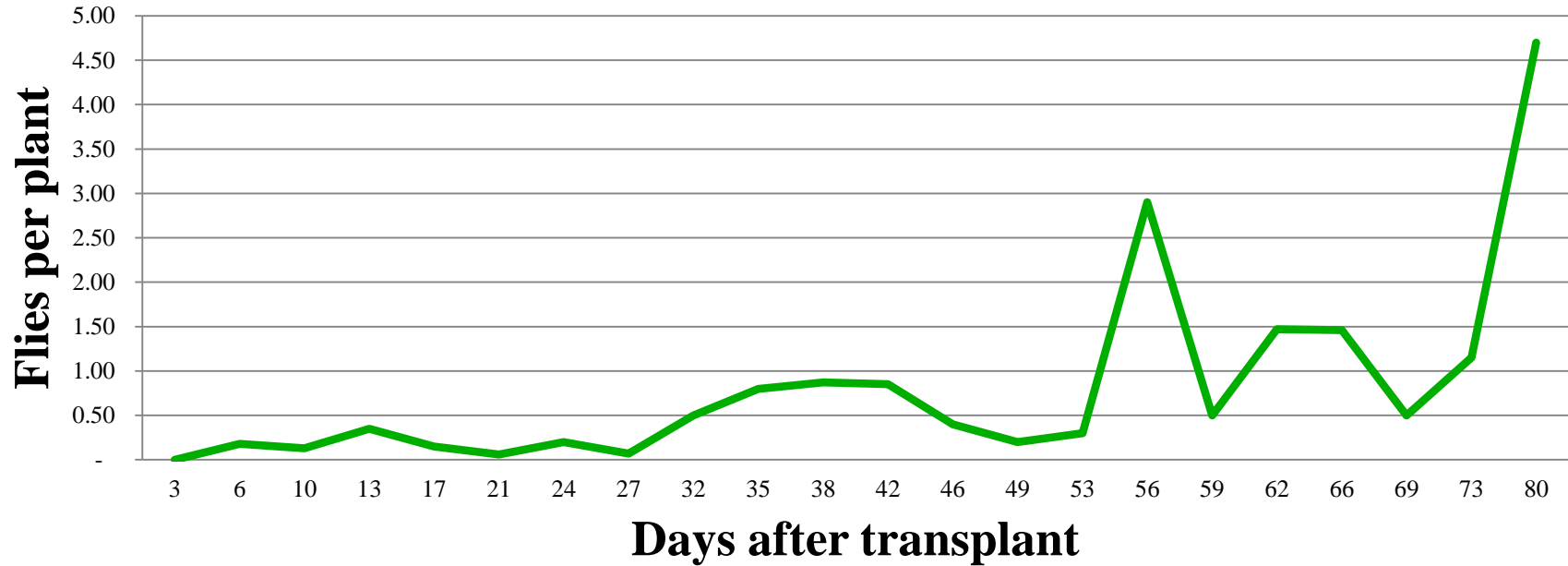


Working with Women's groups



Women's group in El Salvador

Whitefly count

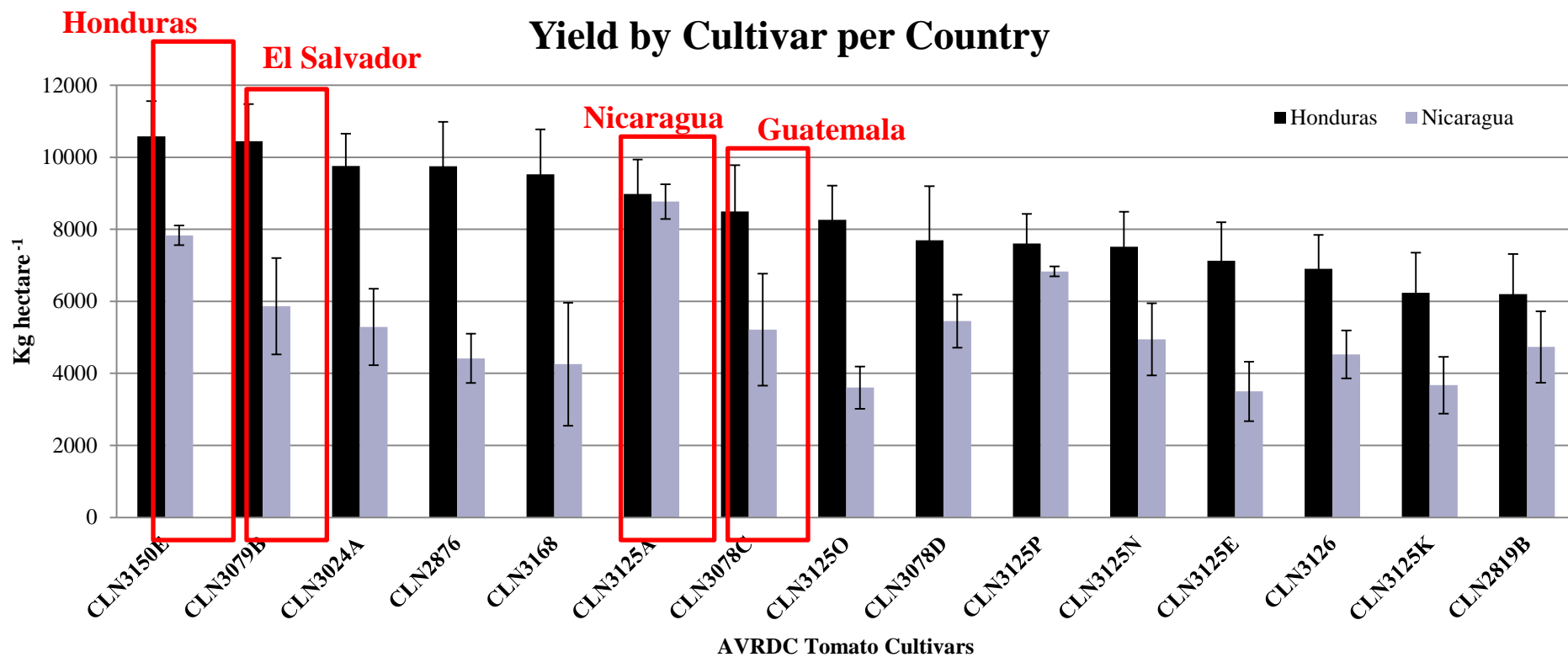


Economic threshold is **one** fly per plant



59 ddt

Yield by Cultivar per Country



Challenges

- **Post – harvest characteristics**
 - **cant just produce, you have to market to consumers**
- **Producing and storing seed**
 - **our partners need knowledge and technology in seed storage and drying**
- **Seed technology is available through sister HortCRSP projects – Kent Bradford**

Post harvest fruit evaluation

- **Work with regional specialists in post harvest to evaluate our selected cultivars for : firmness, pH, Brix, color, viscosity, disease, etc..**
- **This is a different approach to post-harvest no coolers or gadgets, but rather, genetics**

**Post harvest technology workshop
was planned for this fall, but a bit
of a miscommunication here**

Al Kader - UC. Davis

Marita Cantwell - UC Davis

Hector Aguilar - FHIA Honduras

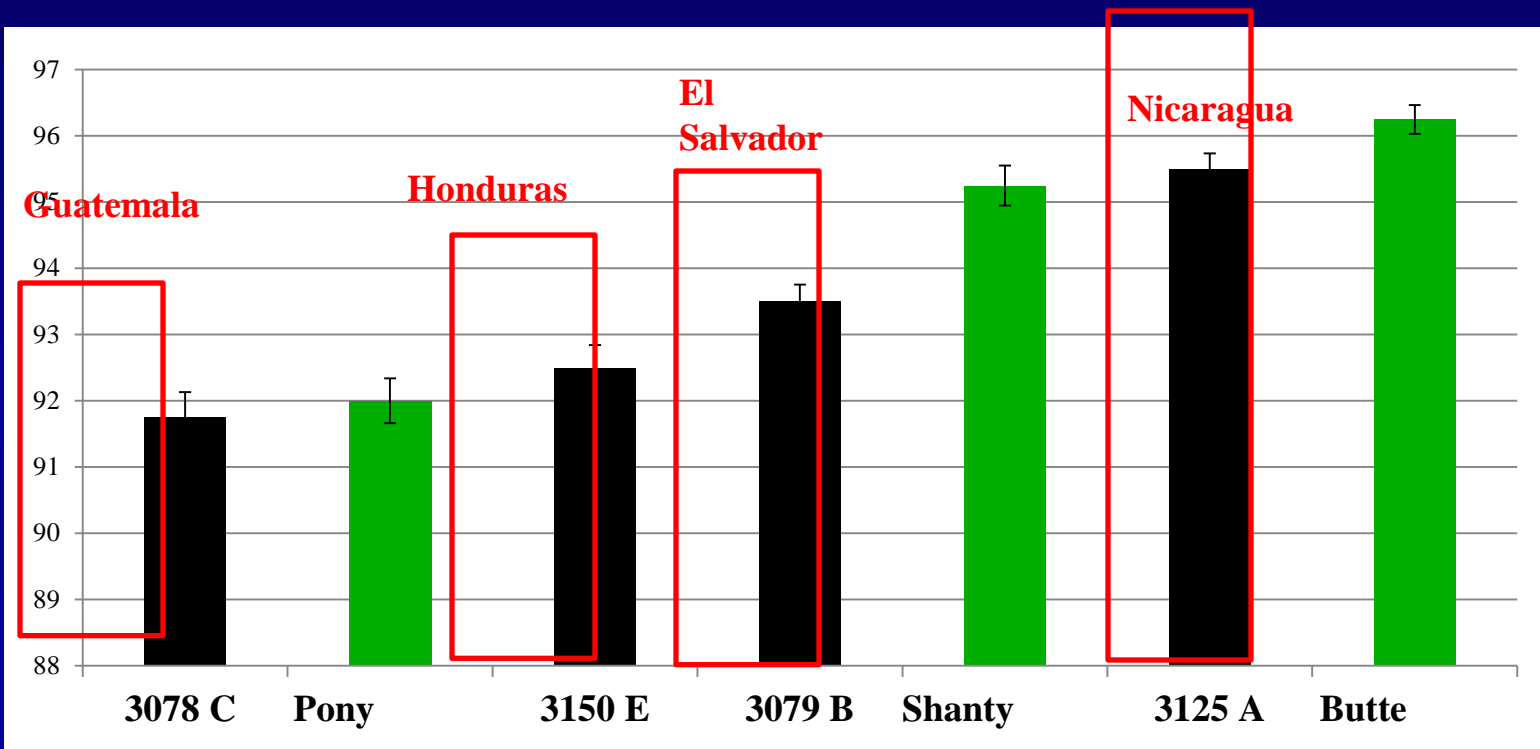
Sergio Torres Portuguese – ITCR Costa Rica

Raul Guerra – UW Madison and UNA Nicaragua

Post Harvest evaluation

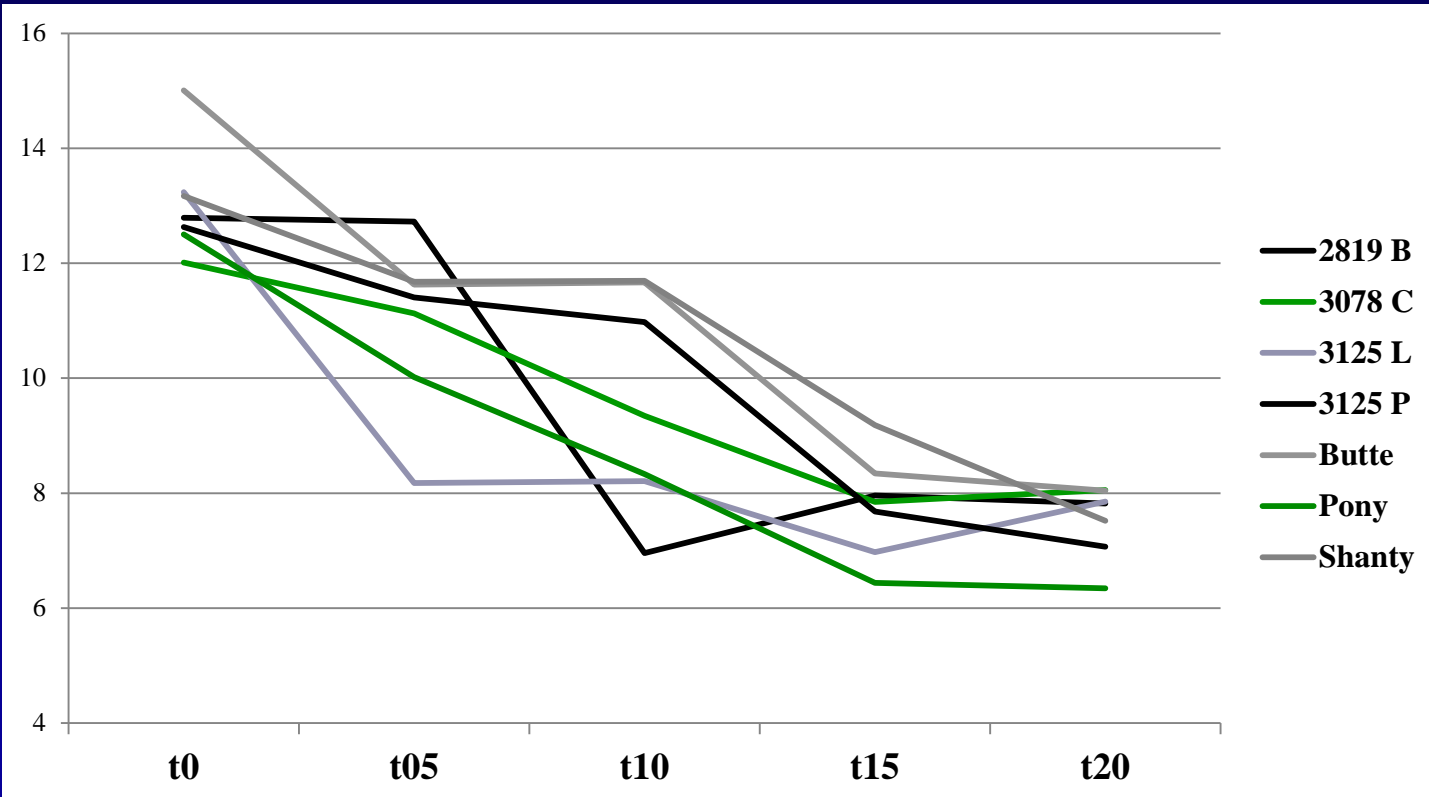
Wisconsin, Costa Rica and Nicaragua

Days to breaker





Fruit firmness compared to checks

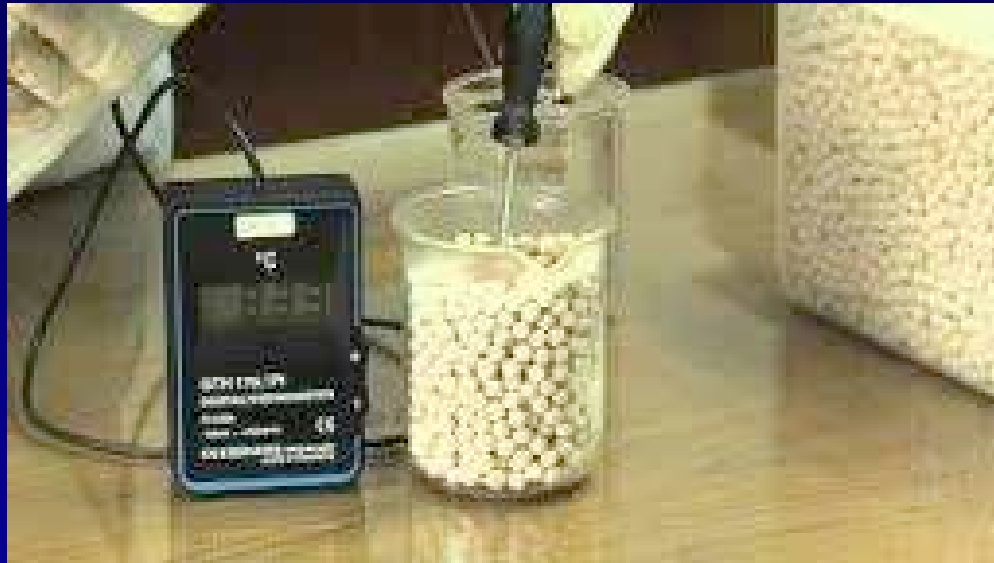


Another huge challenge for us

Post harvest seed technology

- **Drying beads – Kent Bradford**
- **We will to organize a summer workshop to transfer the beads and technology to our women's groups, butseeking to somehow fund this.....**

Drying beads Inter-CRSPing



Technology to
Dry seeds for
Longer term
storage

Rhino Research and Kent Bradford

Curse of success: achieved many goals, but is it a sustainable business for our women's groups?

- seed business is not trivial -
need more technology and
business skills

Knowledge, Technology, hands-on experience