NVDMC Update
Sept 2008

Quick History
• Not-for-Profit Corp. formed late 2005
• Awarded a 3-year contract from FL Citrus Commission
• 12 member Board, representative of industry
• Established to identify, acquire, evaluate, sublicense and protect new citrus varieties
• Early necessity to focus on systems and support of home breeding programs

Relationship with IFAS & CREC
• Substantial support of Plant Improvement Team’s work (Castle, Gmitter, Grosser, Moore, Ling)
• Coordinated Global Exploration
• Variety Evaluation Days
• Integrate Expertise
• Purchase Lab Equipment, build structures, Doc Prep
• Fund Post Harvest Research
• Fund Variety Development & Rapid Evaluation
• Fund sensory evaluation, consumer acceptance
• Seek better models for introduction

Highlight Recent NVDMC Funded IFAS Achievements I
• 5 mandarin selections moved forward (EEO)
  – 3 seedless, two seeded but exceptional quality
• Irradiation of seeded selections
  – 6 mandarin, 1 dark red pummelo
• LB 8-9 seedless trials, group of 10
• Data gathered on LS Murcott lines
• Research to ID aromatic compounds associated with flavor
• Research to correlate chemical data with human taste (collaboration with USDA and FDOC)

Highlight Recent NVDMC Funded IFAS Achievements II
• Planted several thousand triploid hybrids
• Top worked several hundred triploid hybrids
• Made several thousand new hybrids, using new sources of seedlessness genes
• Bred Canker tolerant seedless Grapefruit-like hybrids
• Development of new breeding parents
• Cybridization: Remove seed from successful varieties, without otherwise altering integrity

Status of IFAS Full-Release
• Minneola Hybrid
  – Earlier in many cases than Minneola, has favorable traits.
  – Not seedless, but does well in isolation
  – Patent application process near completion
  – Trials, market tests, consumer panels point to success.
  – ITN, ….. It WILL be out this year.
Status of IFAS EEO

- April 8th 2008, NVDMC recommended 12 varieties to move into EEO

Next steps
- Prep of release request documentation
- Prep of patent applications
- Budwood availability (now - Sept 09)

- Source of delays in delivering these varieties
  - Requirement for 2nd generation veg prop
  - Availability of budwood from outdoor source trees
    - DPI working on these selections as high priority
    - NVDMC proposed an expedited system of delivery, but deemed too risky

IFAS EEO Candidates

- Easy Peelers
  - A. (Lrg, EP, Jan) (8/08)
  - B. (med, EP, Feb) (9/9)
  - C. (Lg, EP, D-J) (9/9)
  - D. (Oct, Sl, good color) (05/09)
  - F. J(SL, EP, H-qual, Jan) (N/A)
  - G. (Sl, EP, H-qual, Feb) (9/9)
  - H. (LS Murcott: Inconsistent)

- Oranges
  - Early Orange (color, solids, low seeded) (12/08)
  - Mid Orange (color, solids, LS, Jan-F) (N/A)
  - January Orange (11/30/08)
  - Seedless Late - slightly later (11/08)
Relationship with USDA-ARS

- Support plant breeding & research team (McCollum, Stover, Bowman, Niedz)
- Variety evaluation opportunities, and grove walk-through
- Integrate expertise
- Purchased equipment to facilitate evaluations
- Built structures to speed evaluation process
- Fund plant breeding, professional evaluations

Highlight Recent NVDMC Funded ARS Accomplishments

- Fruit quality data collected on 15 advanced selections in replicated trials
- 4,000 seedlings of new hybrids established from 5 primary crosses
- Maintaining original seedlings in compliant greenhouse (eliminate future cleanup)
- Identified thin peeled seedless Foster GF
- Entered three varieties into NVDMC early release evaluation

Status of USDA ARS Release

- Media: Announcement of available varieties 8/14
  - Oct 17 & Dec 18: Farm Visits
  - Nov 14 Deadline for acreage Req. – Tang & GF Hyb
  - Feb 11th – Deadline for acreage Reg. – Orange
- Early Pride Tangerine (Oct-Dec), low seeded
- Seedless Pineapple Orange (Dec-Feb)
- Seedless Surprise: Grapefruit-Tangelo Seedless Hybrid

Early Pride Tangerine

Seedless Pineapple Orange
Seedless Surprise

Other Varieties

• Spain, late season selections, not yet available
• Japan, negotiating, mid-season seedless easy peel high quality mandarin
• Australia, awaiting budwood for mid-season seedless easy peel mandarin
• Italy: three mandarin varieties, one orange in CGIP
• California:
  – Tango (evaluation signed, commercialization proposed)
  – Gold Nugget (evaluation/commercialization proposed)
  – Low Seeded Daisy, Fairchild, Encore, Kinnow – Evaluation Contract - October
  – LS Fremont (Early discussions ongoing)

Other Varieties

• Transgenic Selections
  – NVDMC Participating in the ametic regulatory approval process
  – Establishment of roadmap for regulatory roadmap, involves multi-state and 4 federal agencies.
  – Work will entail layers of permits, field/lab trials, data collection and complex web of investors, cooperators and IP.
  – NVDMC will seek, when and how appropriate, access for Florida growers, should material prove viable and available.
• Israeli
  – Time expiring on availability, grower club under discussion

Volunteers Needed

• Between IFAS and ARS, variety evaluations scattered throughout season (Sept – April)
• Need growers, packers, marketers, processors
• Commitment generally 1 ½ hours + travel
• Complete feedback forms
• All interested parties, please contact:
  Peter Chaires
  863.682.0151
  pchaires@flcitruspackers.org

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