



Creating an organic world together

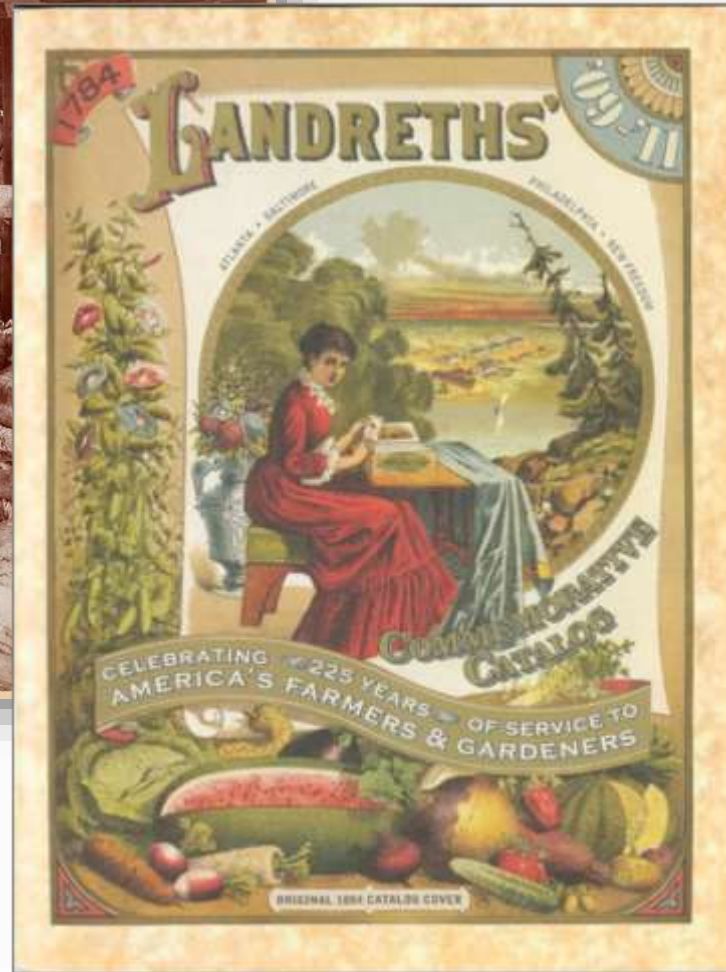
2021 VVBGA Annual Meeting
January 25, 2021
Adrienne Shelton
Sr. Organic Product Specialist

ENZA ZADEN

Vegetable Seed Industry



USDA Seed Distribution Program
1839-1924



Plant Breeding Developments

- 1900: Discovery of Mendel's genetic experiments on peas
- 1920s: Development of hybrid (F1) corn
- 1926: Henry Wallace founds Pioneer Seeds
- 1990s: Commercial introduction of genetically modified organisms (GMOs)
- 2010s: Gene editing technology (CRISPR/Cas9)

Established in 1784
5th oldest corporation
in the United States



ENZA ZADEN

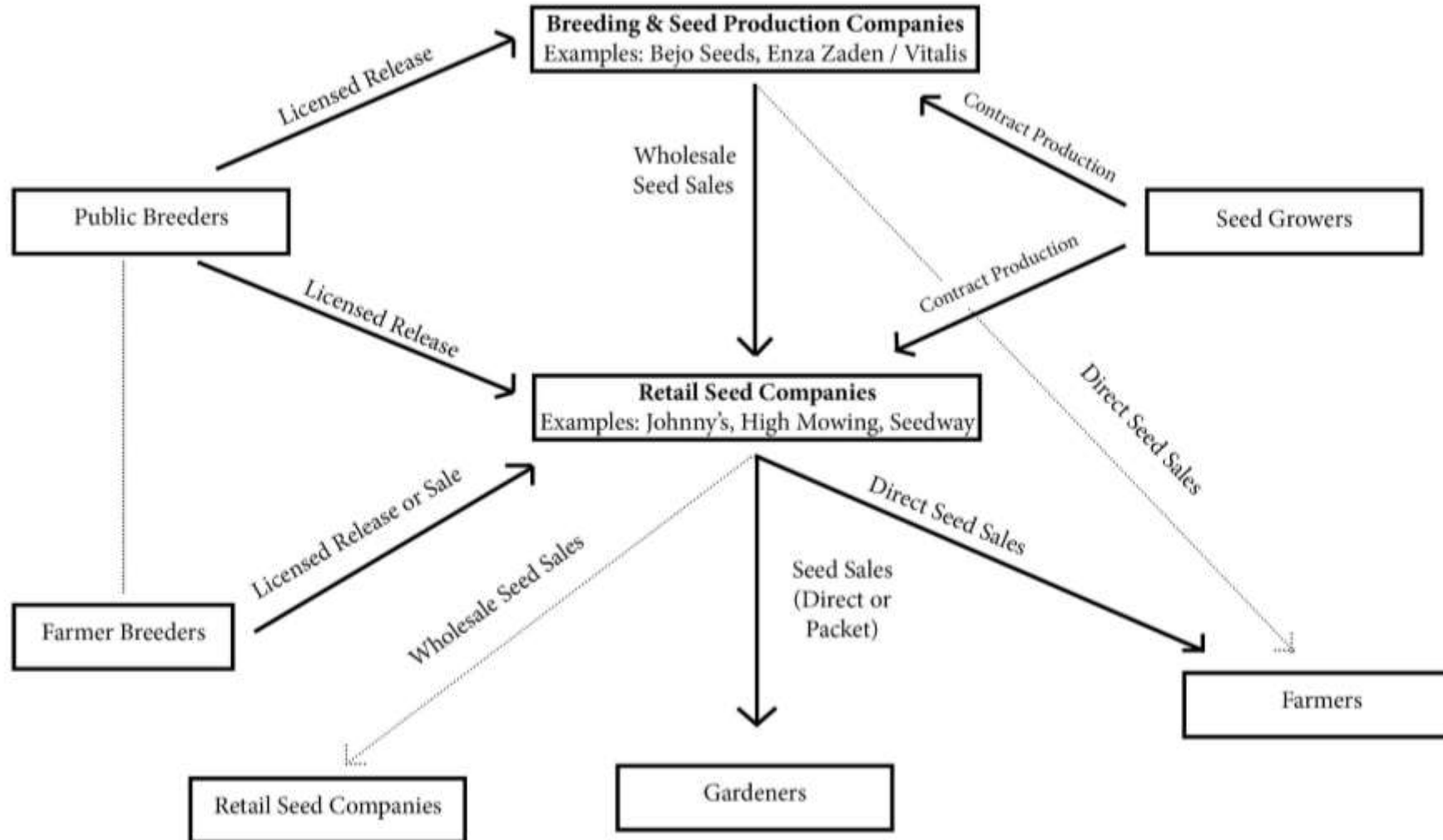
Vegetable Seed Industry: Retail Seed Companies



Photo credit: SeedLinked



Vegetable Seed Industry Structure



ENZA ZADEN

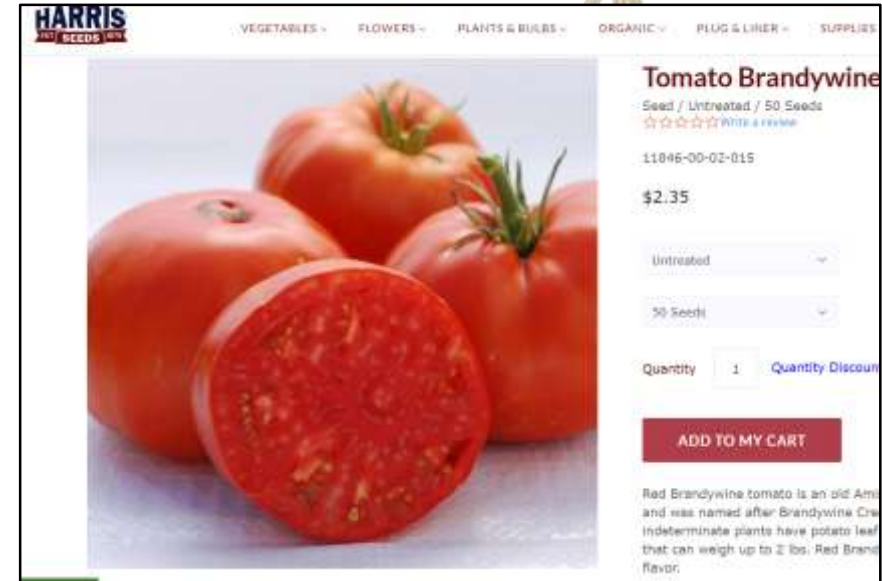
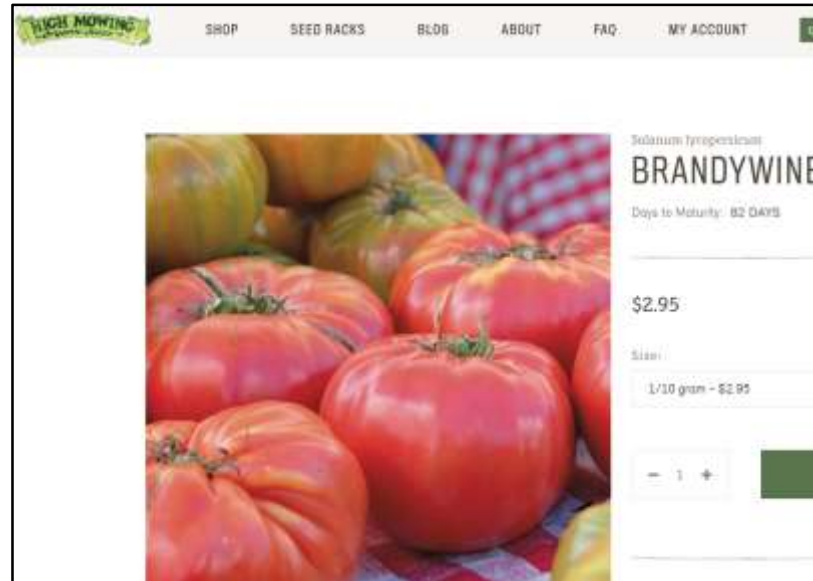
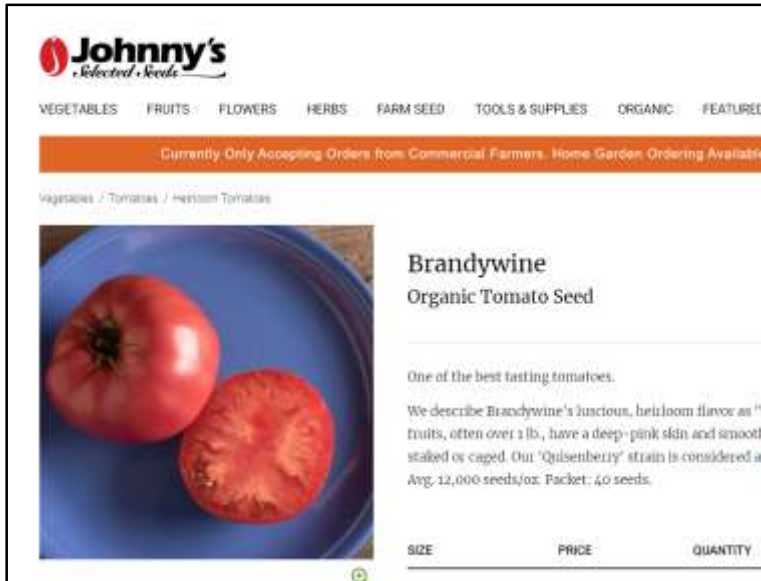
Vegetable Seed: Hybrids (F1)



Example of Sakura Cherry Tomato:

- Variety bred by Enza Zaden / Vitalis Organic Seeds
- We developed the parent lines and manage all seed productions
- Many retail seed companies sell Sakura, but all seed is coming from one source (us)
- USDA Seed Laws prohibit duplicate naming = no other red cherry tomato can be named Sakura

Vegetable Seed: Open Pollinated (OP) Varieties



Example of Brandywine Tomato:

- Open-pollinated variety
- Parent lines are not required to maintain the variety
- Variety is maintained by making careful selection in a population to ensure vigor, quality, and "true" seed
- Many different strains are available
- Options for retail seed companies: manage their own productions, contract productions, wholesale purchase from seed production companies

How do you choose the best seed?

Get to know your seed reps – ask questions!

Talk to other growers in your area to find out what is working best for them.

For crops that have a high turn-over of varieties (spinach, for example), do not become dependent on one variety

Conduct on-farm trials to find out what works best for you!

- Place trial plots in the center of your crop, rather than on the edges
- Maintain the trial plots with the same attention as your main fields
- Repeat trial over multiple successions/years
- Collect basic data!



Track your plantings and trials on the go

A better food system starts with the seeds you plant. Join the collective seed story by tracking your own plantings, participating in collaborative trials and have your review connected to other to create a democratic, transparent and resilient seed system.

Shape a Seed Story



Create your own trials, track current plantings



Track, review, analyze, compare with others



Mobile or web



ANDROID APP ON
Google Play



AVAILABLE ON THE
App Store



DON'T need cell reception to use in the field



Decision-making tool powered by connected grower data



Free to use!

Available Feb 15, 2021



Thank you!

Adrienne Shelton

Thetford, VT

Sr. Organic Product Specialist

+1 703 231 5377

a.shelton@enzazaden.com