

Public to Private:

A Brief History of the Seed Industry in the United
States

1850-present

Lanikeha Center – Ho'olehua

August 24-25, 2012

Perhaps the biggest single environmental catastrophe in human history is unfolding in the garden. The loss of genetic diversity – silent, rapid, inexorable – is leading us to a rendezvous with extinction, to the doorstep of hunger on a scale we refuse to imagine.

– Cary Fowler and Pat Mooney and
Fowler, *Shattering: Food, Politics, and the Loss
of Genetic Diversity*

Hawai'i Public Seed Initiative

Where Have We Been and Where Are We Going?

10,000 Years of Seed Work

For the first 9,920 years

Farmers/Gardeners saved seed for the next planting.



150 years ago the US did not have a seed industry... today we have the world's largest

In 1854 seeds were sourced
From catalogs

Farmer or Gardener Exchange

On Farm seed saving

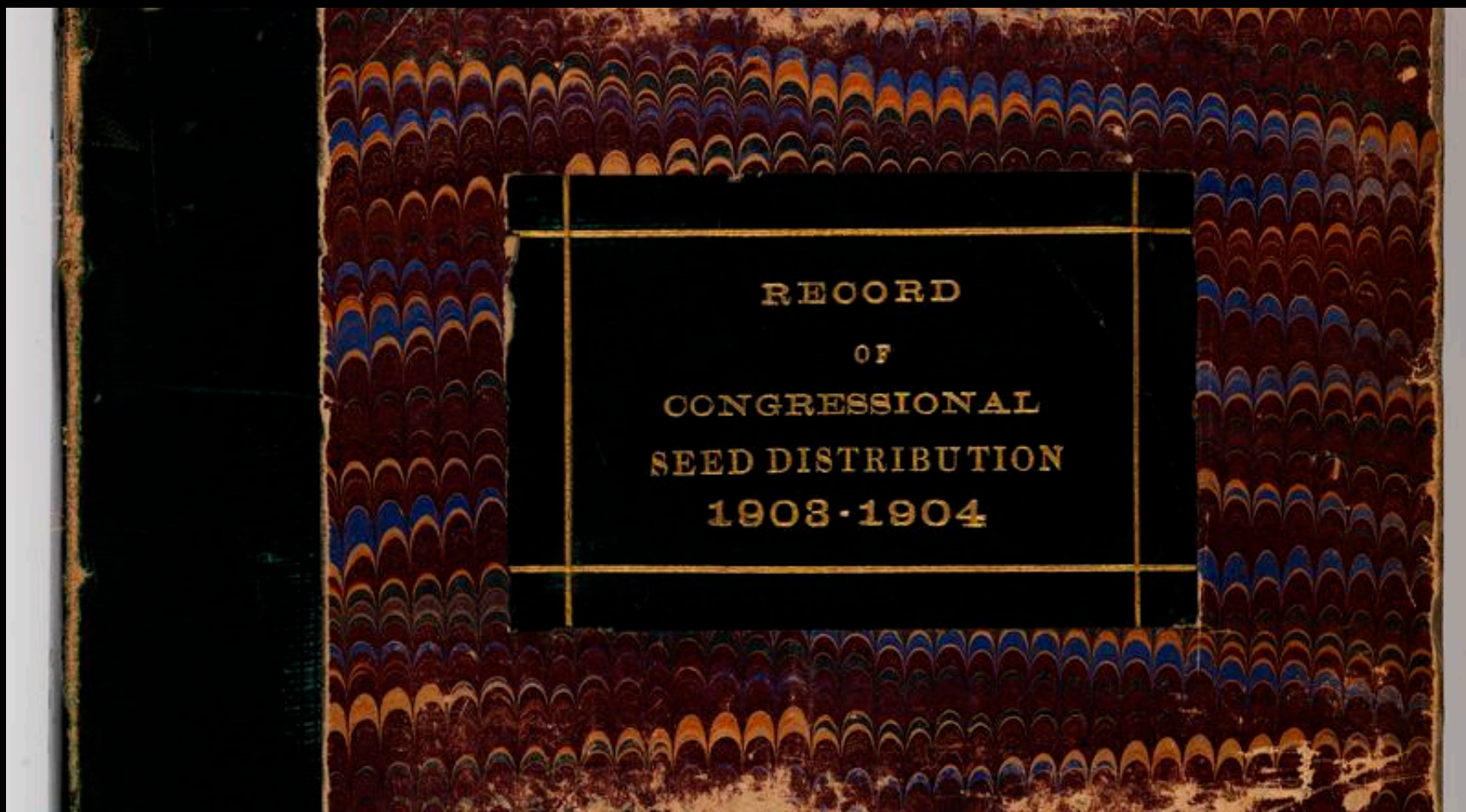
US Government



Beginning in 1850's, the US Patent and Trade Office began to collect, propagate and distribute Seed varieties throughout the US



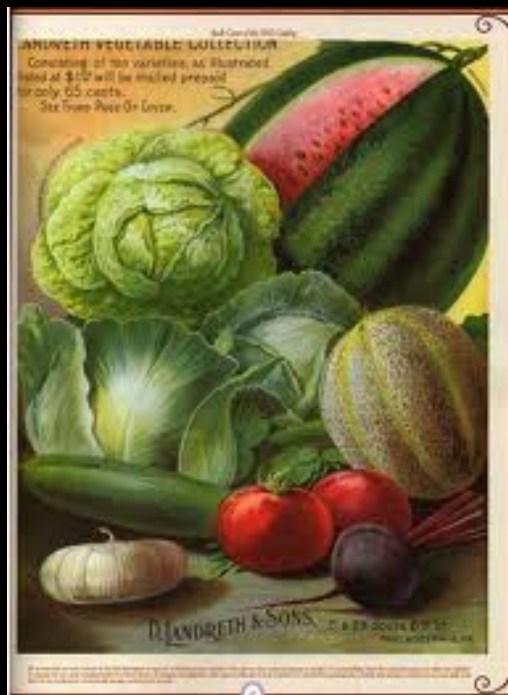
By 1861, PTO had distributed 2.4 million packages of seed – each containing 5 varieties



PTO reached it's highest volume in
1897

when 1.1 Billion Packets of seed
were distributed

Now under USDA Management



The first commercial seed crop was produced in 1866..... Cabbage.

In 1883 American Seed Trade Association ASTA was formed and immediately began to lobby for the cessation of the Government programs.



Hybrids began In the early part of the 20th Century

- Increase in profitability
- Farmers buying every year
- Land Grant Universities Refused to give exclusive rights to seed companies
- * Growth hindered by federal programs
- Unfair trade practices
- Slowing yield from government varieties strengthened argument for privatization of seed development in order to foster greater “food security”



In 1924, after 40 years of lobbying, ASTA succeeded in convincing Congress to cut the USDA seed distribution program

Public role was “plant breeding and research”

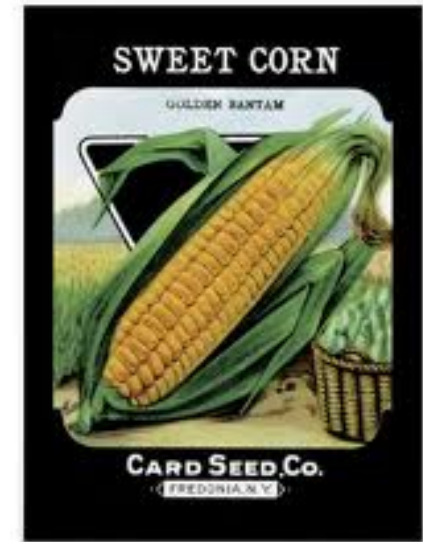
Plant breeding for private companies to use inbred parent lines and breeding stock for the seed trade

Government seed programs and the idea of “seed as public commons” had lasted 74 years



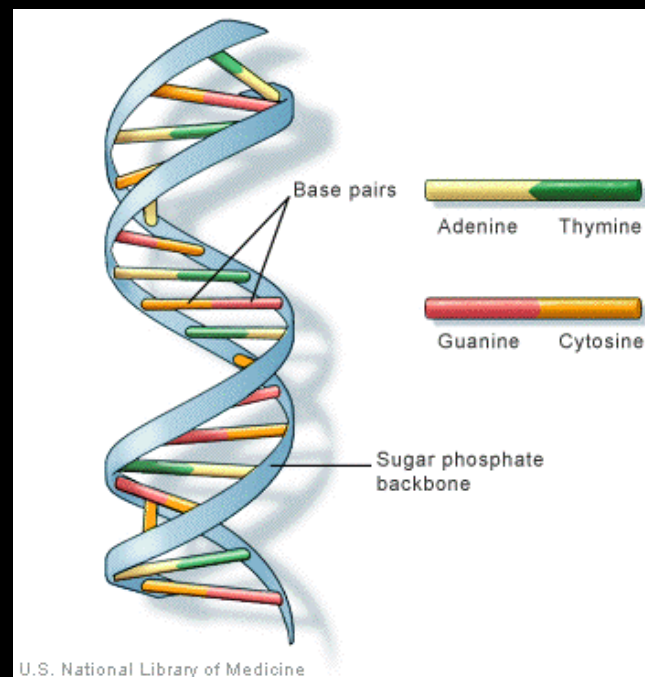
Growth after World War II

- Lots of small regional companies formed in the 1950s
- 200 seed companies on the mainland
- 100 in Hawai'i
- 1960s bigger companies began buying smaller ones
- 1966 Molokai Seed Service first winter corn/Hawaiian Research
- 1968 Trojan Seed Co. corn research Kihei, Maui
- 1968 Pioneer Hi-bred corn research West Kauai



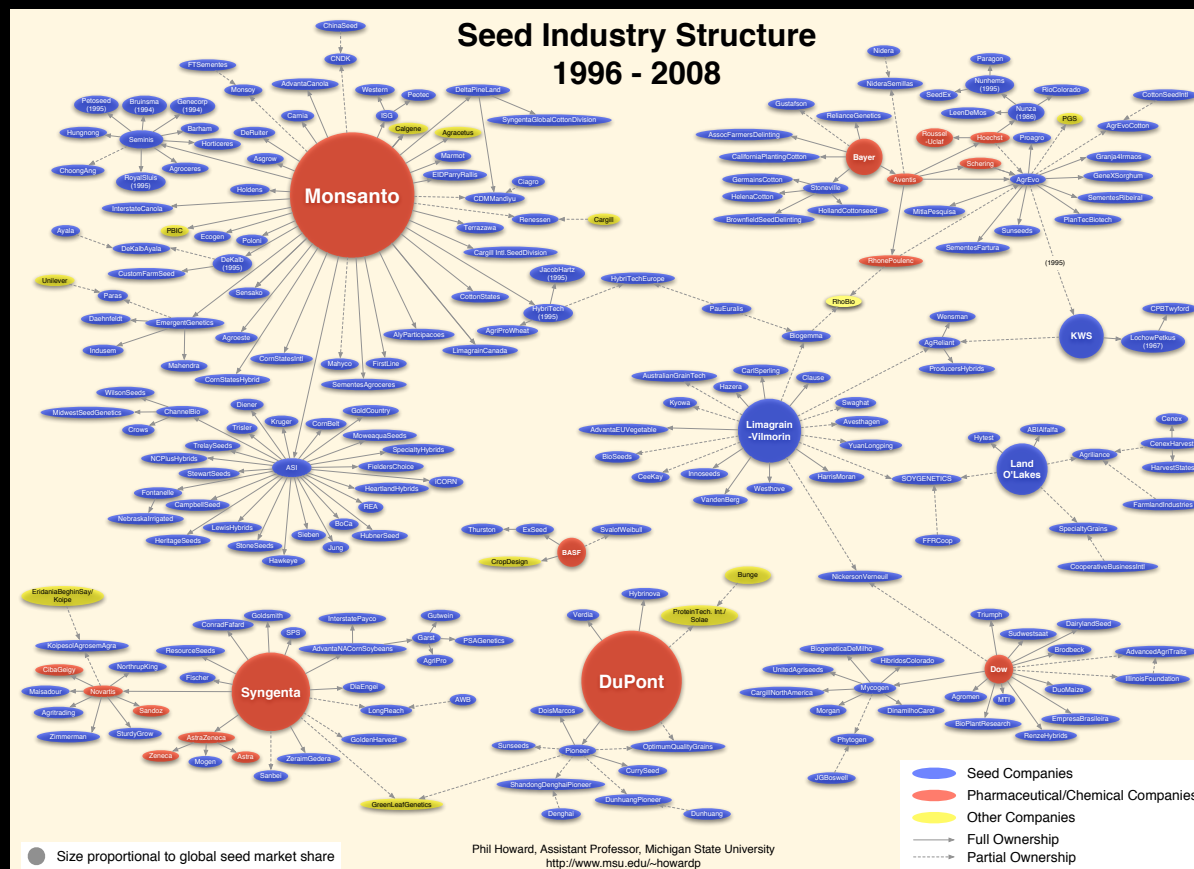
Diamond vs. Chakrabarty - 1980

- Life forms can be owned
Genes can be owned
- In the months following
1,800 Patents were filed
at the PTO
Chemical companies began
purchasing Seed Companies



In a few short years, a majority of plant genetics were owned by a few multinational companies. No other natural resource has ever shifted from public to private so quickly with so little oversight

Consolidation of the Seed Industry



A Century Ago

Beet: 288 Varieties
Today 17

Cabbage: 544 Varieties
Today: 28

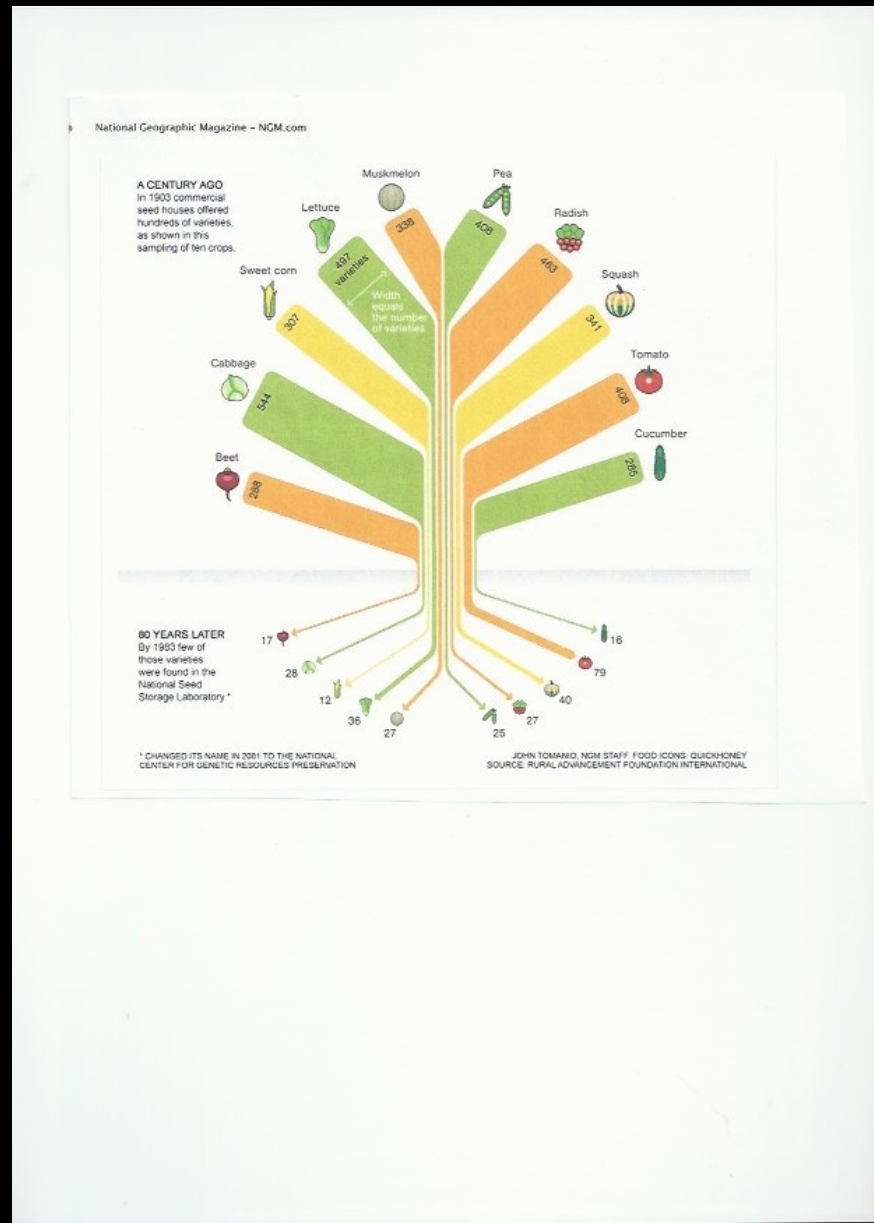
Sweet Corn: 307 Varieties
Today 12

Lettuce: 497 Varieties
Today 36

Pea: 408 Varieties
Today 25

Radish: 463 Varieties
Today 27

National Geographics – 9/11



Seed Savers Exchange Yearbook 2011

460 Pages

13,876 Varieties

21,711 Total Listings

Vegetables

Fruits

Grains

This is 3-5% of varieties that were
grown in the US in 1900

Seed Savers Exchange Yearbook


2011



Hawai'i Island Seed Exchange 2003 to 2011



FIRST ANNUAL HAWAII ISLAND
SEED & PLANT EXCHANGE
Saturday, March 1, 2003 HONOLULU, HI



Calling all
farmers,
gardeners, and
plant lovers!
Come and share
your gardening
successes with
others
Help build
community and
self-sufficiency

Schedule:


9-10	Set-up, network
10-11	Educational talk and demonstration "The importance of Seed Saving" by Gery Herbert & Nancy Readfeather
11-12	Exchange & trade: seeds, cuttings, and plants
12-1	Picnic Lunch
1-2	Introduction to compost making. Make a pile together!

RSVP (ASAP) to
Nancy Readfeather 322-2801
or Ipo Truloran 328-2192

Event co-sponsored by: Know Your Farmer Alliance & HIGI (US) Home Garden Exchange in Honolulu, HI

Seed Symposium: 2010

Hua ka Hua: Restore Our Seed



HUA KA HUA - Restore Our Seed
A Public Seed Symposium
April 17-18, 2010
Outrigger Keauhou Beach Resort, Kona, Hawai'i

Symposium sessions include:

- History of Seed Industry Development
- State of Seed in Hawai'i
- Seed Saving Basics/Reproductive Biology
- Separating the Seed from the Chaff: Seed Cleaning Basics
- Seed: A Farmer's Perspective
- Conducting On-Farm Variety Trials
- Fundamentals of Plant Variety Improvement and Breeding for Organics
- Historical Perspective and Reproduction of Hawaiian Crops
- Variety Improvement and Breeding
- Creating Island Seed Working Groups
- Visioning Future Work Together

Speakers include:

Matthew Dillon – Founder, OSA	Ted Radovich, Ph.D. – Sustainable Farming Systems Laboratory, UH Mānoa
Micaela Colley – Director, Research and Education, OSA	Alvin Yoshinaga – Restoration Ecologist, Center for Conservation Research and Training (CCRT), UH Mānoa
John Navazio, Ph.D. – Research and Education Specialist, OSA; Seed Specialist, Washington State University	Also Seed Researchers/Farmers/Home Producers from around the State
Frank Morton – Owner, Wild Garden Seed	
Hector Valenzuela, Ph.D. – Crop Extension Vegetable Specialist, UH Mānoa	

Partners: The Kohala Center, College of Tropical Agriculture and Human Resources (CTAHR), UH Mānoa; College of Agriculture, Forestry and Natural Resource Management (CAFNRM), UH Hilo; Hawai'i Organic Farmers Association (HOFA); Seed Conservation Laboratory/UH Center for Conservation Research & Training (CCRT); and the Organic Seed Alliance (OSA) and their university partners.

Sponsors: USDA Organic Research and Education Initiative (OREI); Organic Seed Alliance; Keauhou-Kahalu'u Education Group, Kamehameha Schools; and County of Hawai'i Research & Development.

For registration and full program, visit www.kohalacenter.org/seedsymposium/about.html or contact The Kohala Center at 808-887-6411, or info@kohalacenter.org.
Free Public Talk: April 16, 2010 at 5:30 p.m. See Web site for details.

THE KOHALA CENTER




Photo by Scott Nelson

Seed Dreams for Hawai'i

Mahalo to Matthew Dillon – Seed Matters

