

Canola Adaption to Irrigated Production in New Mexico

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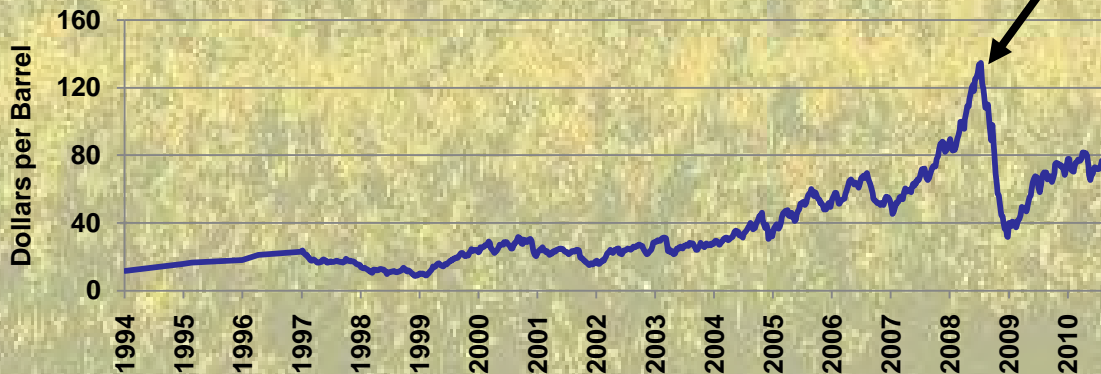
ASA Ann. Meeting, Long Beach, CA
Oct 31 – Nov 4, 2010

Global Increase of Oil Prices



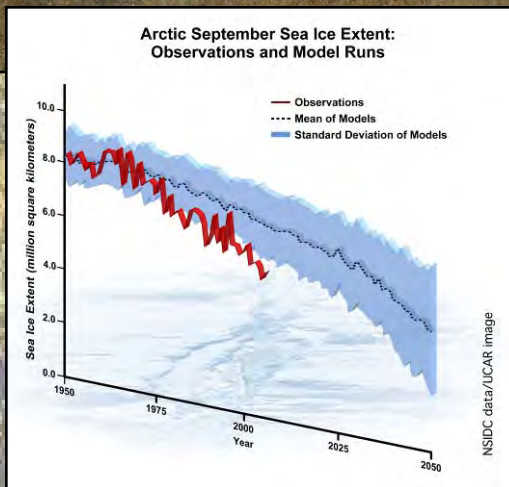
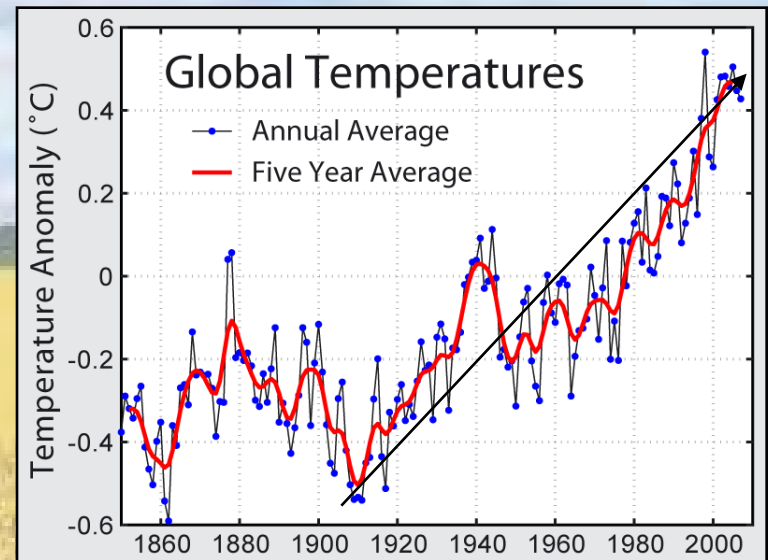
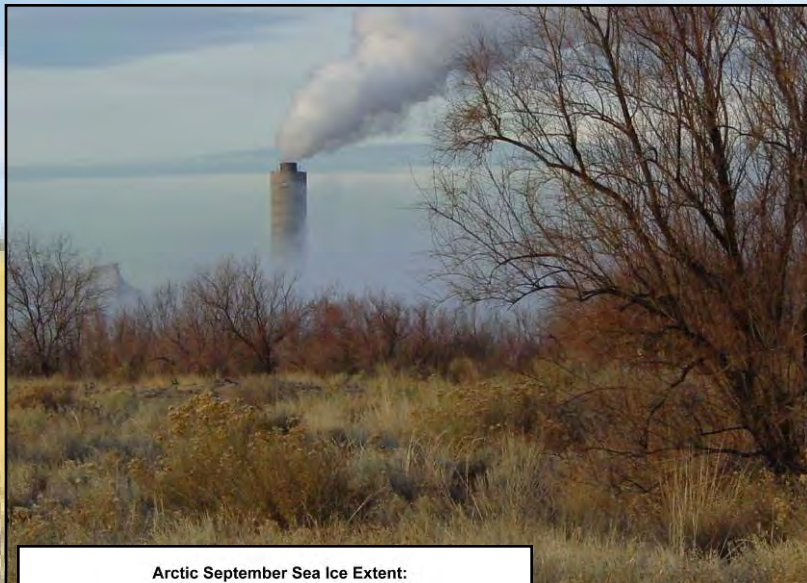
\$134/bbl
July 18, 2008

Weekly United States Spot Price



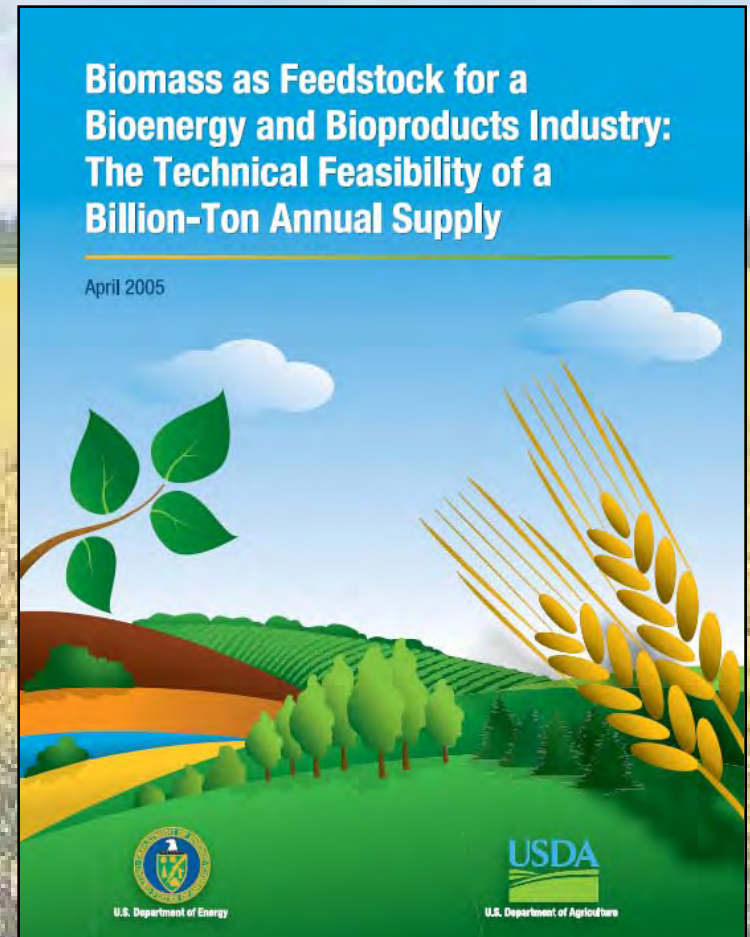
\$73.14/bbl
Oct 1, 2010

Global Warming & Increased GHG's



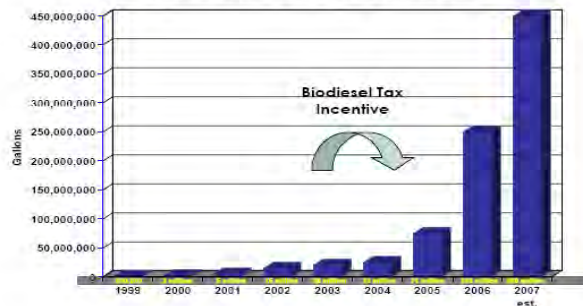
USDOE & USDA Response

- Billion Ton Annual Supply
- Biomass as feedstock
- Liquid fuel
 - Ethanol
 - Biodiesel
- Forest products & byproducts
- Ag products & byproducts



Current & Future Biodiesel Plants

US Biodiesel Demand



- 400-450 million gallons demand predicted for 2007
- Current production capacity is more than 1.4 billion annual gallons (Sept. 2007)
- Nearly 1.9 billion annual gallon additional capacity under construction or planned (Source: NBB)

Commercial Biodiesel Production Plants (January 31, 2007)



Biodiesel Production Plants Under Construction or Expansion (January 31, 2007)



Benefits of Biodiesel

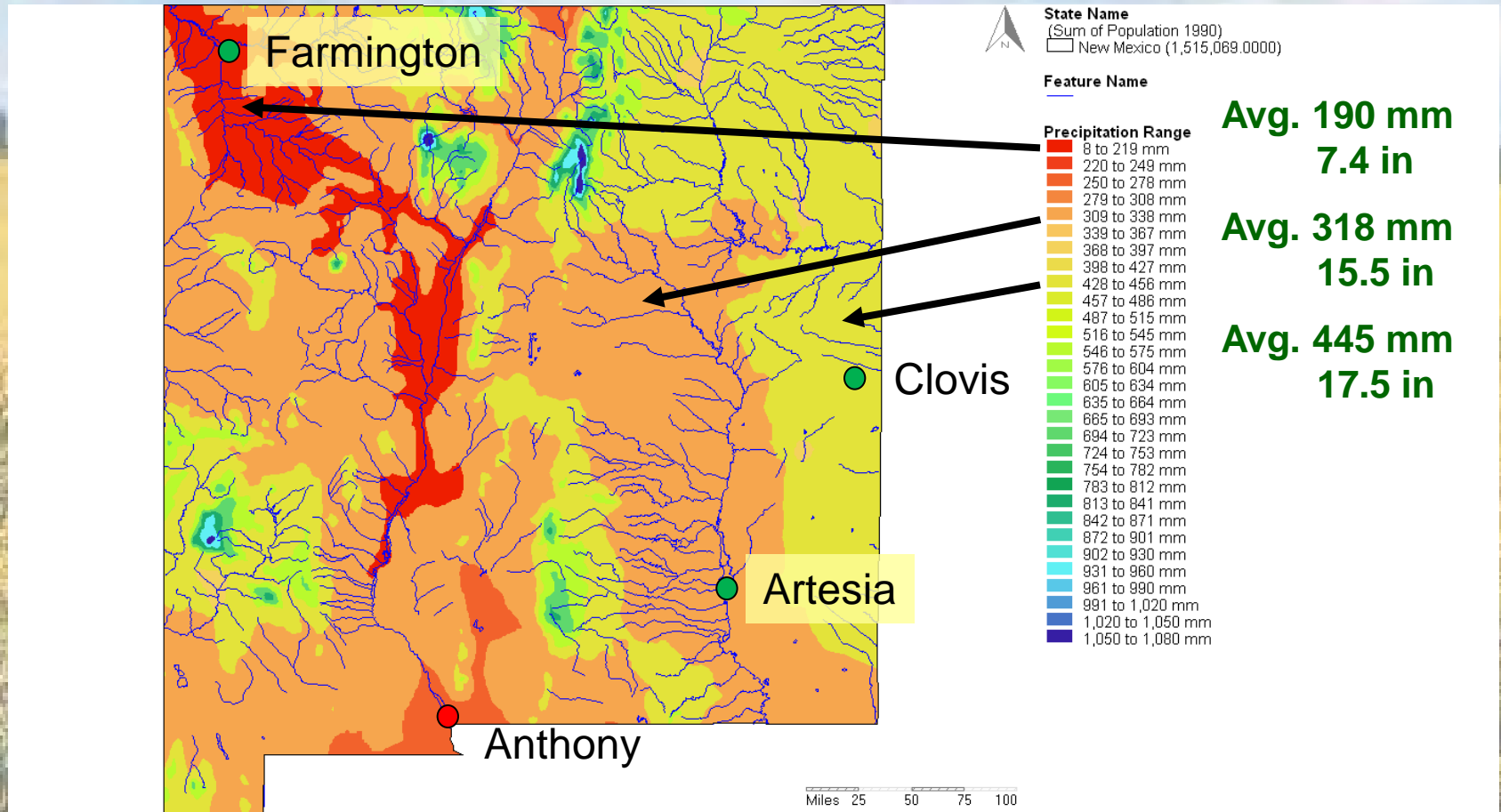
- Diversifying the fuel supply
 - postpones shortages
 - stretches the petroleum fuel we have further
 - increases consumer choices
- Dampen price spikes
 - Alternatives increase consumers' choices
 - Dampens artificial price increases

Ideal Traits for Biodiesel Crops

- Adaptability to the region
- High resource use efficiency
- High seed yield
- High seed oil content
- Suitability for biodiesel production
- Low production costs
- Fit in the cropping system
- Demand for byproducts

New Mexico Annual Precipitation

● Dove Creek, CO



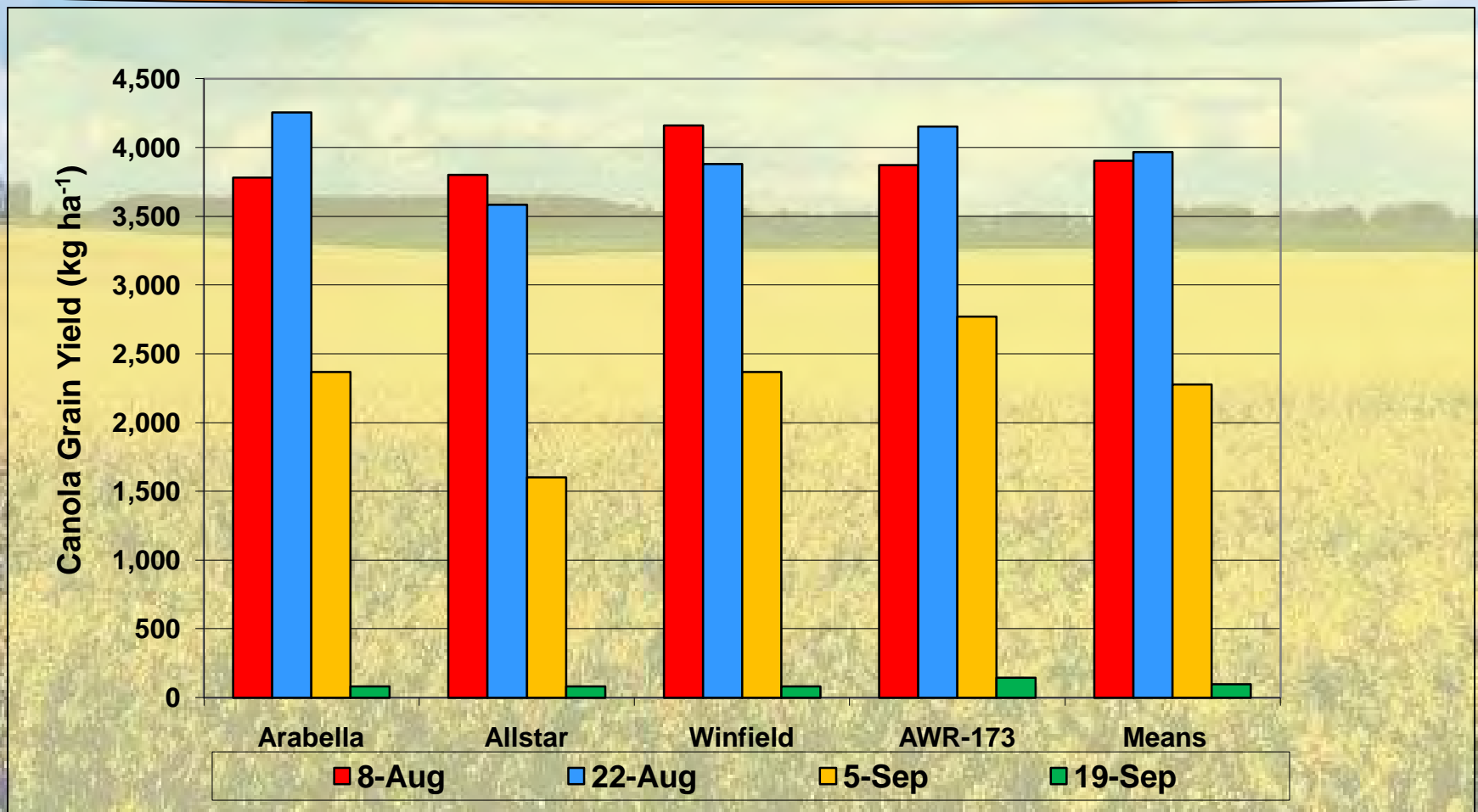
Potential Oil Seed Crops

- Cotton
- Soy bean
- Sunflower
- Safflower
- Canola
- Camelina
- Mustard
- Castor

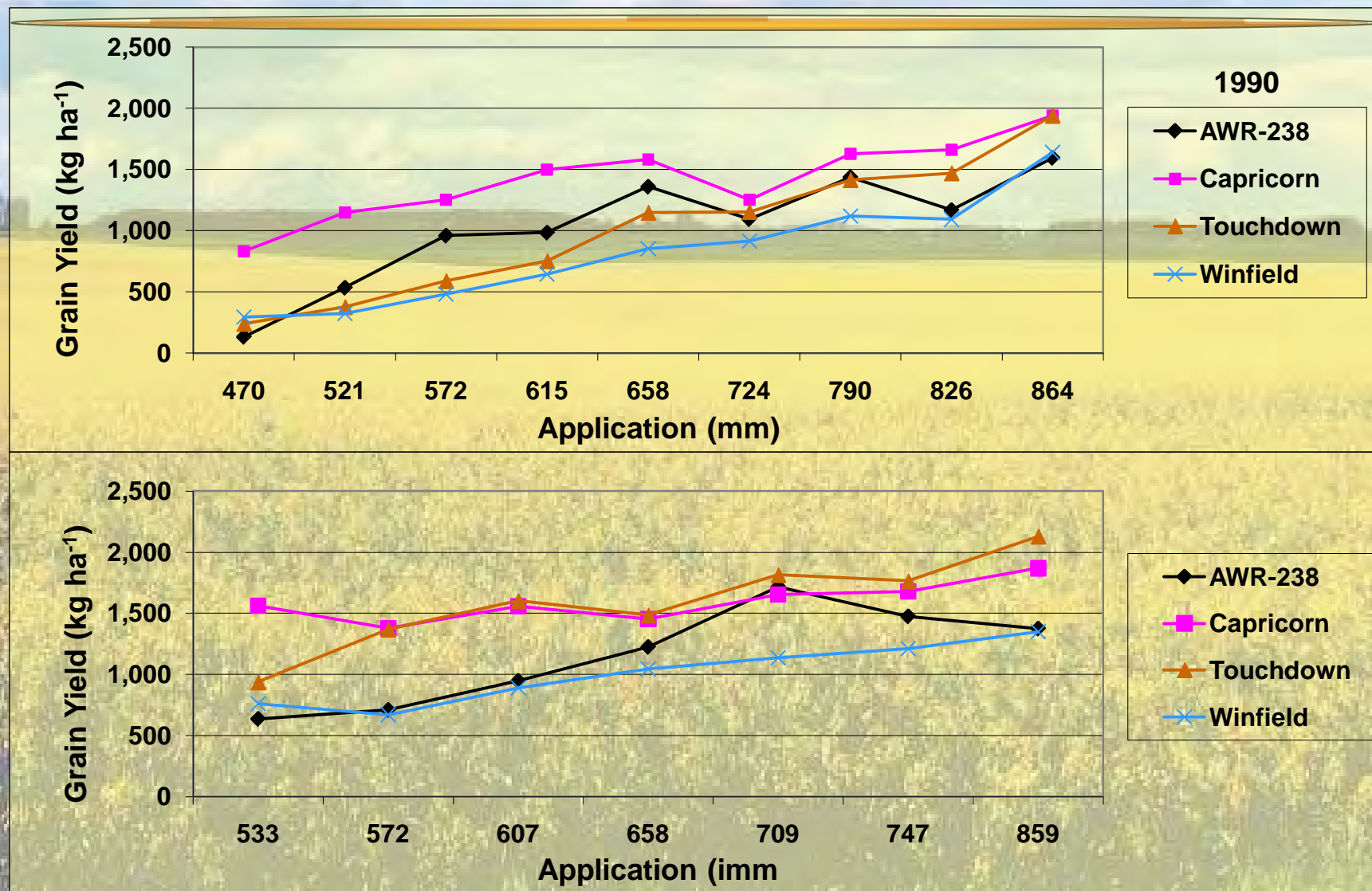


Canola Date of Planting Trials

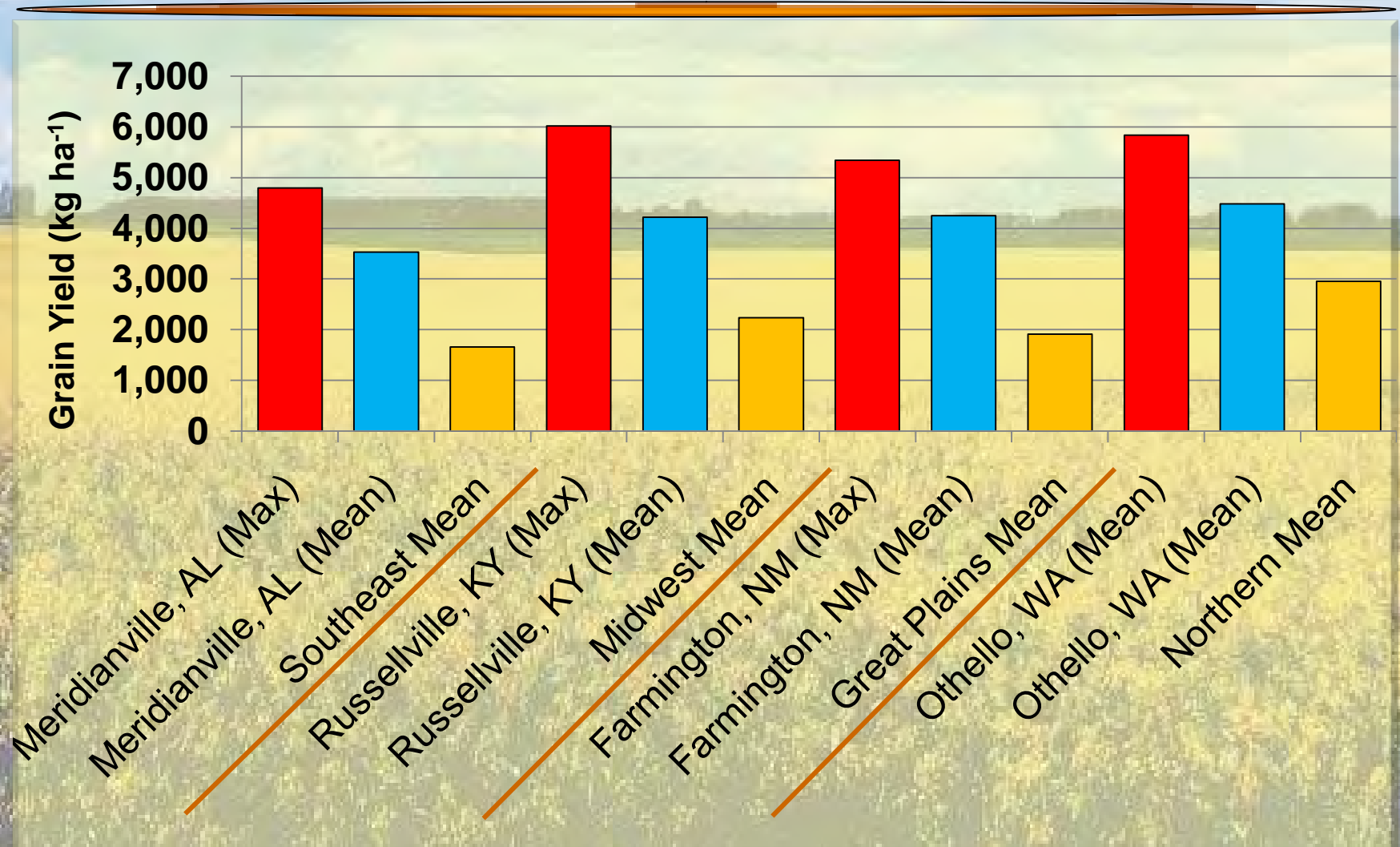
NMSU ASC-Farmington 1989



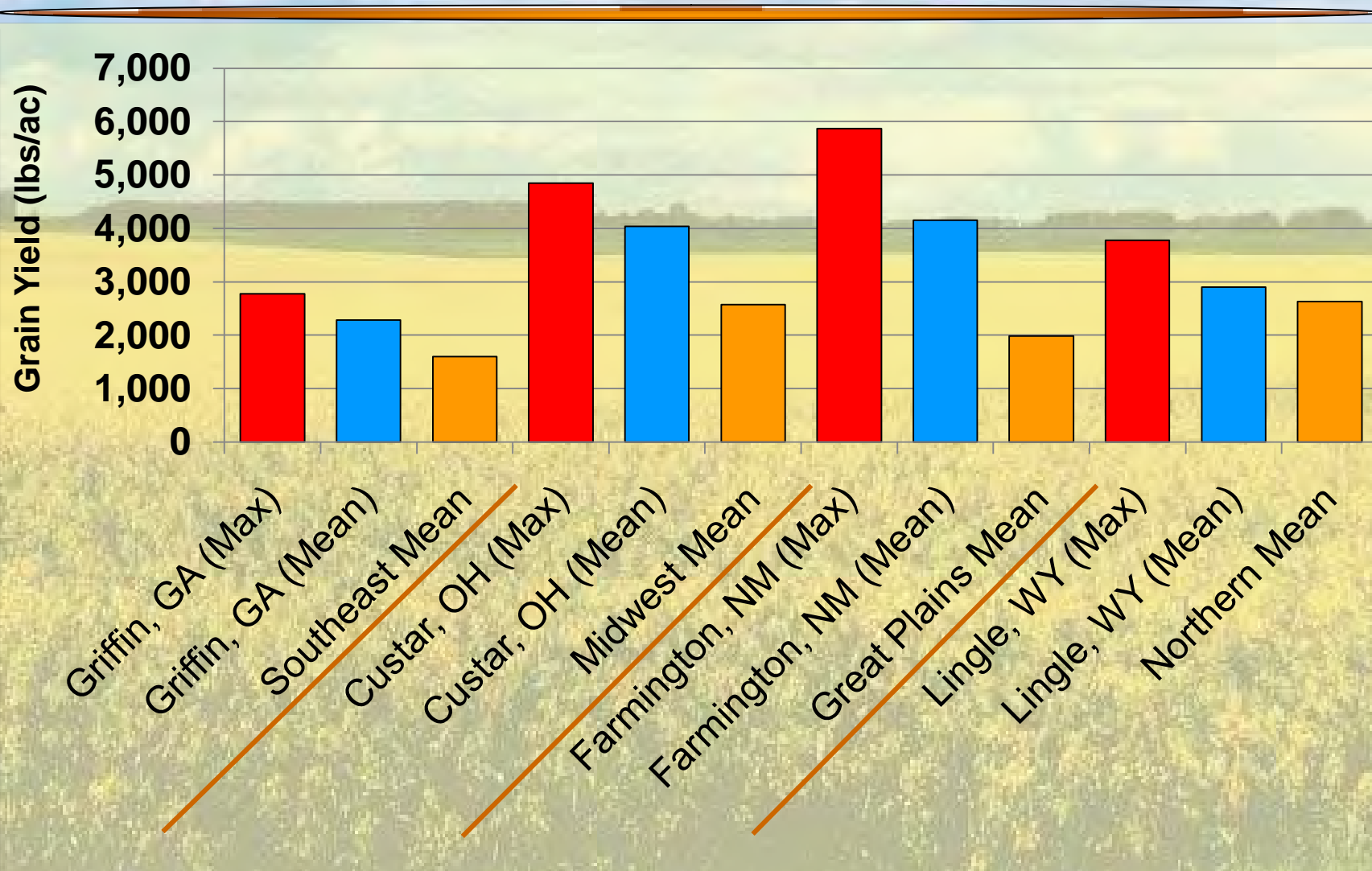
Canola Water Application Trial ASC-Farmington 1990 & 1992



2008 Canola Production - NWCVT



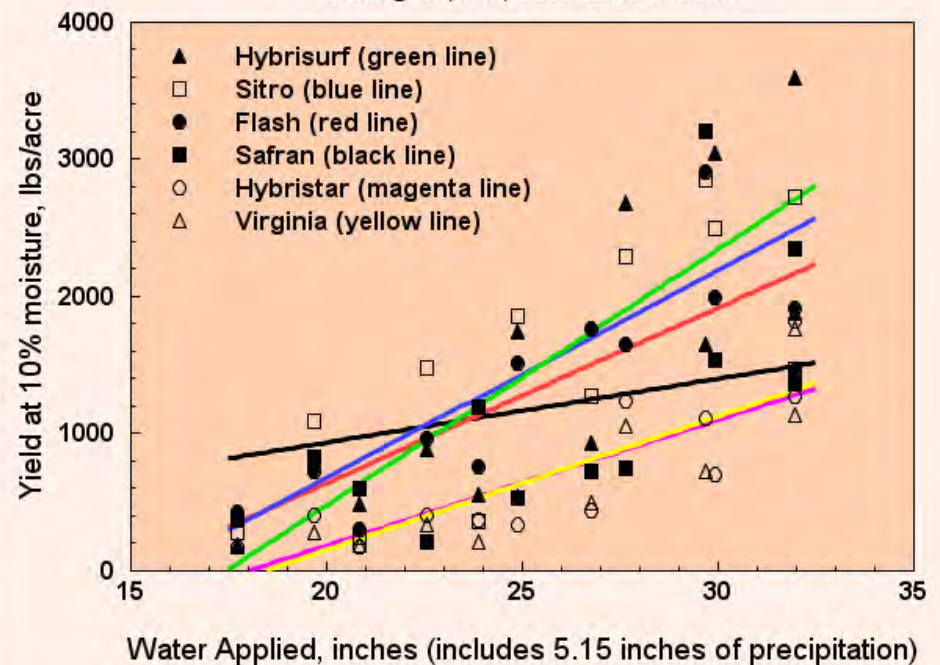
2009 Canola Production - NWCVT



Line Source Water Application



Yield of six winter canola varieties as related to water applied
Farmington, NM, 2009-2010 season



Biodiesel Production Units



Notes of Caution

- Economy is in turmoil
- Substitution of crops to be used as fuel rather than food
- Global vs. local land utilization or displacement
- Further marginalization of resource poor farmers
- Pollution of “Green Industry” byproducts
- Continued increase of consumption must be abated
- **Sustainability**