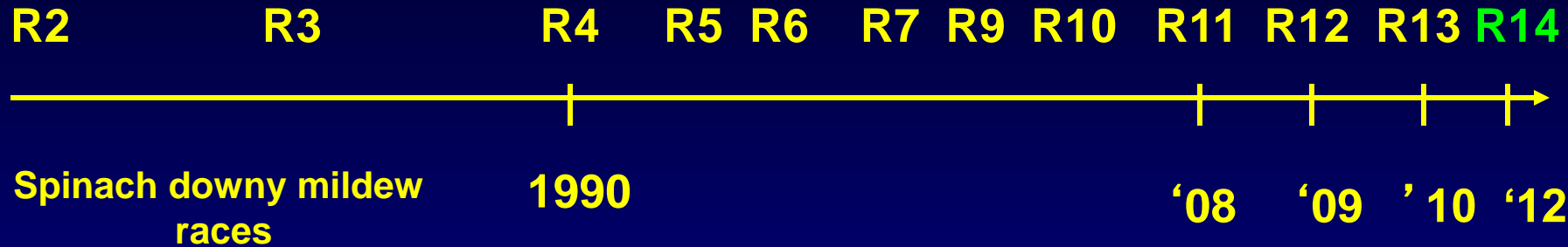


# **Update on Diseases of Coastal Vegetables**

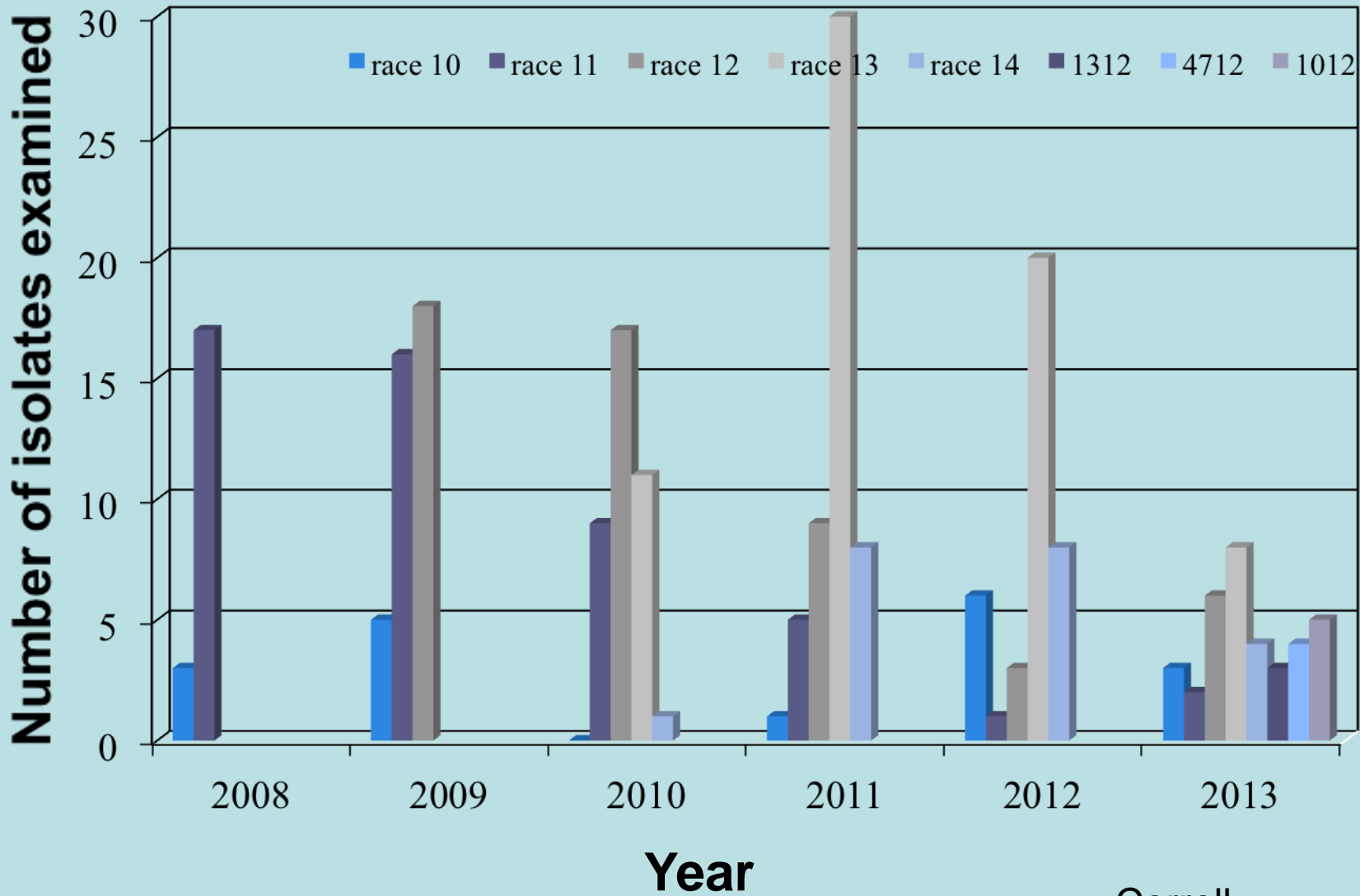
**Steven Koike  
UC Cooperative Extension  
Monterey County**

# CA / AZ : Proliferation of new spinach DM races



# 2013-2014 Summary

- **Races 10, 11, 12, 13, 14, and UA4712 (R 15)**
  - All present and detected
  - Greater diversity than seen in previous years
  - More mixtures (multiple races in field)
- **Main deviating isolates**
  - UA4712 (R 15), UA2213, UA1312, UA1012

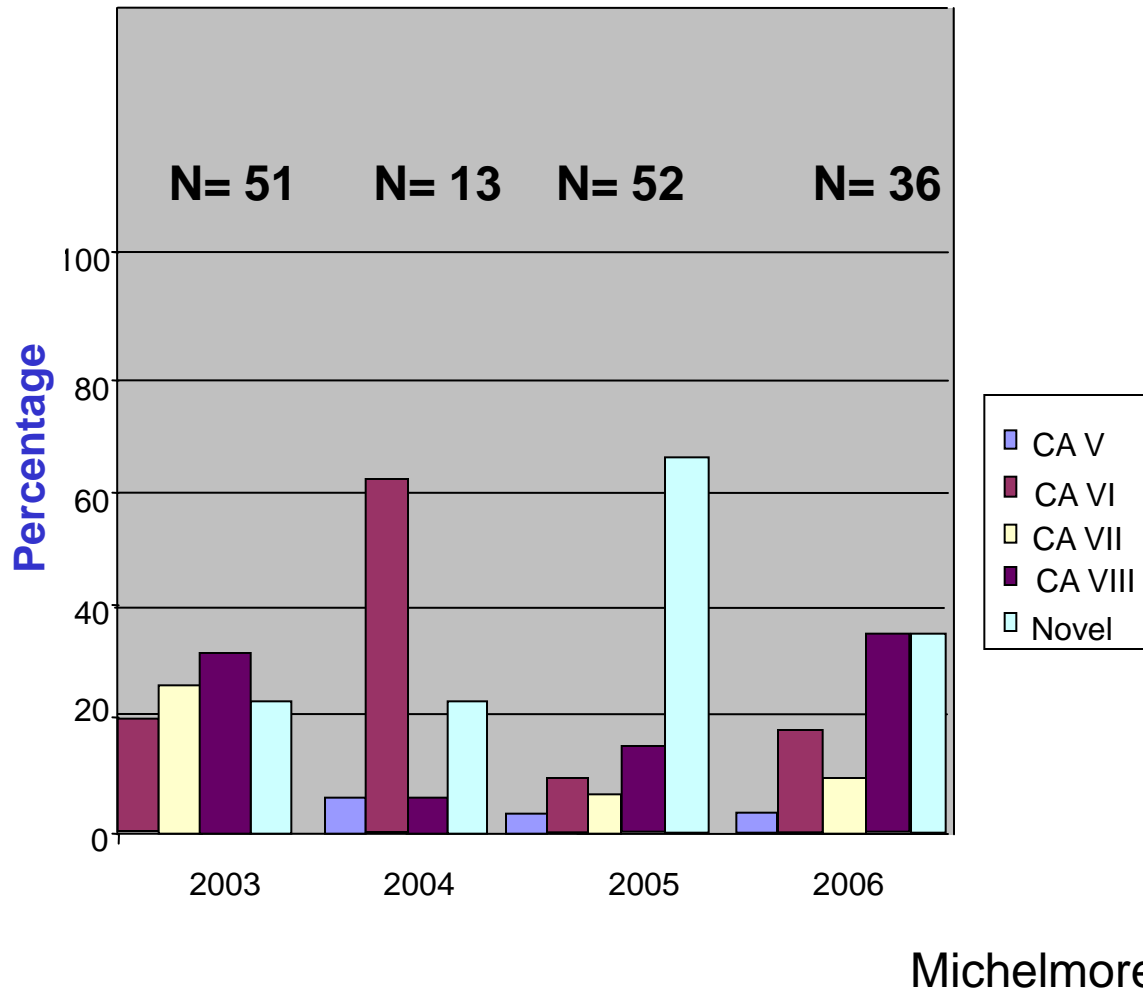


Correll





# Frequency of DM Pathotypes: 2003-2006



**2014**  
**New race:**  
**CA IX?**

Lettuce:  
systemic downy  
mildew



Lettuce: physiological disorder









A close-up, circular field of view showing a cross-section of a broccoli stem. The stem is light green and shows signs of damage. A cluster of fine, white, hair-like structures (mycelium) is visible on the surface of the stem, indicating the presence of a fungal pathogen. The background is dark and out of focus.

Broccoli:  
systemic downy mildew









**TSWV**



**TSWV**





**TSWV**







**Iris yellow spot virus**







IYSV











**Fusarium wilt of  
cilantro**



# New parsley diseases

**Bacterial leaf spot**



**Stemphylium leaf spot**









# Verticillium wilt



# Coastal CA Verticillium Diseases

<u>V. source</u>	<u>lettuce</u>	<u>strawb</u>	<u>pepper</u>	<u>cauliflower</u>
lettuce	++++	+++	+	0
strawberry	+++	++++	+	+
pepper	+	+	++++	+
cauliflower	0	+	+	++++

+++ / ++++ = severe disease

+ = minimal symptoms

0 = no disease

**Note: This is not a host range table.**



# Verticillium wilt

