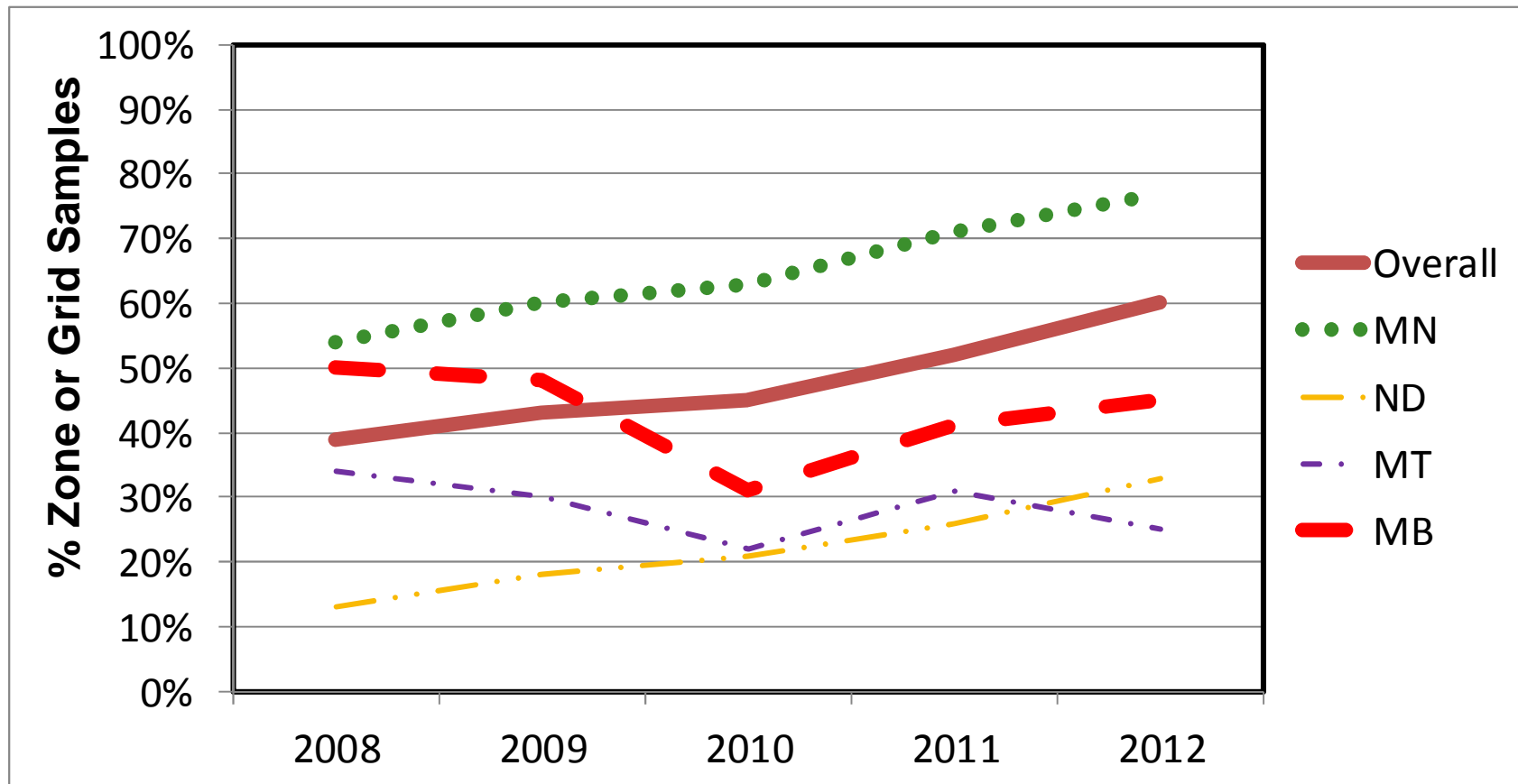


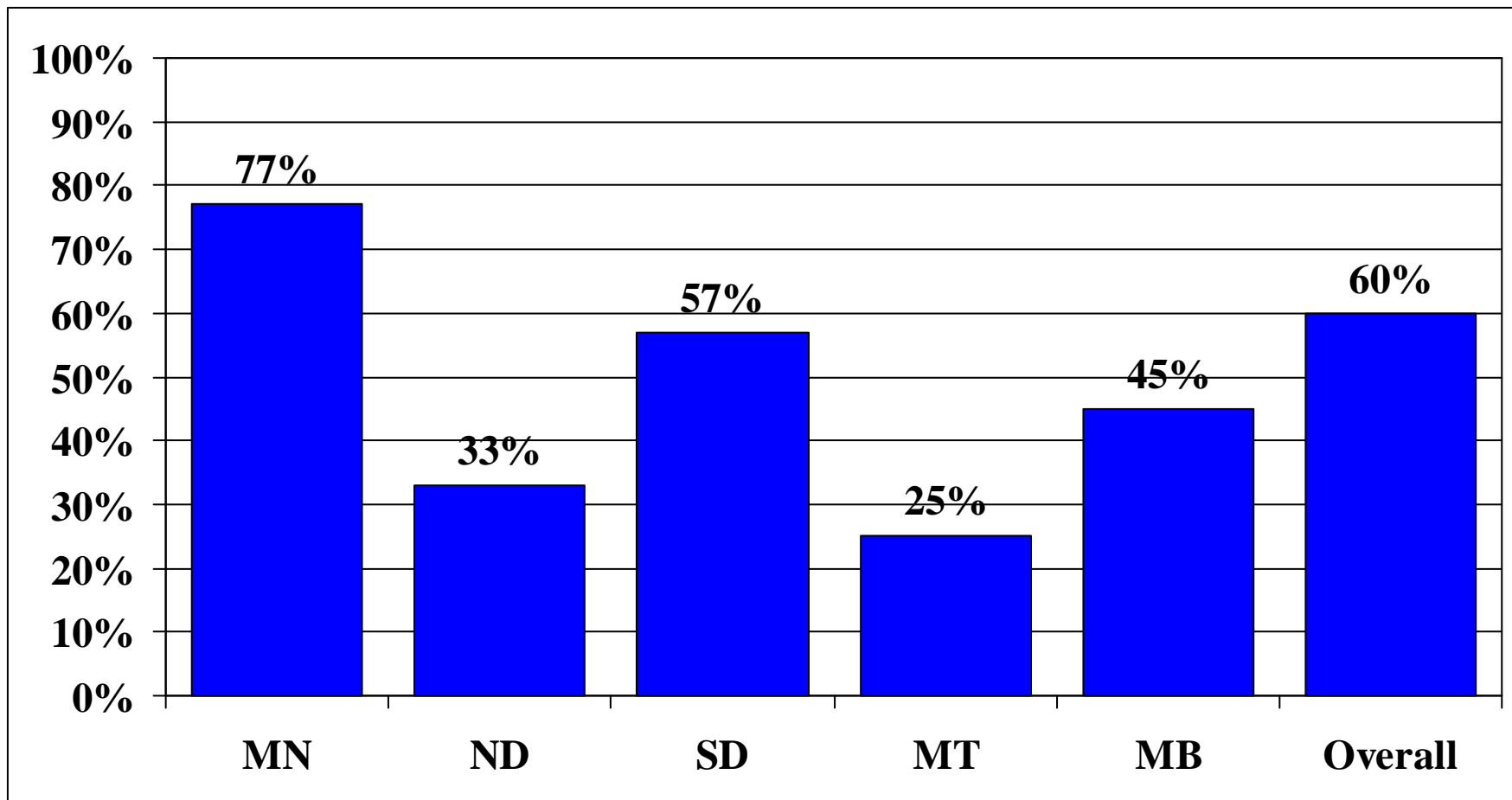
# Trend for Precision Soil Testing

## % Zone or Grid Samples Tested compared to Total Samples



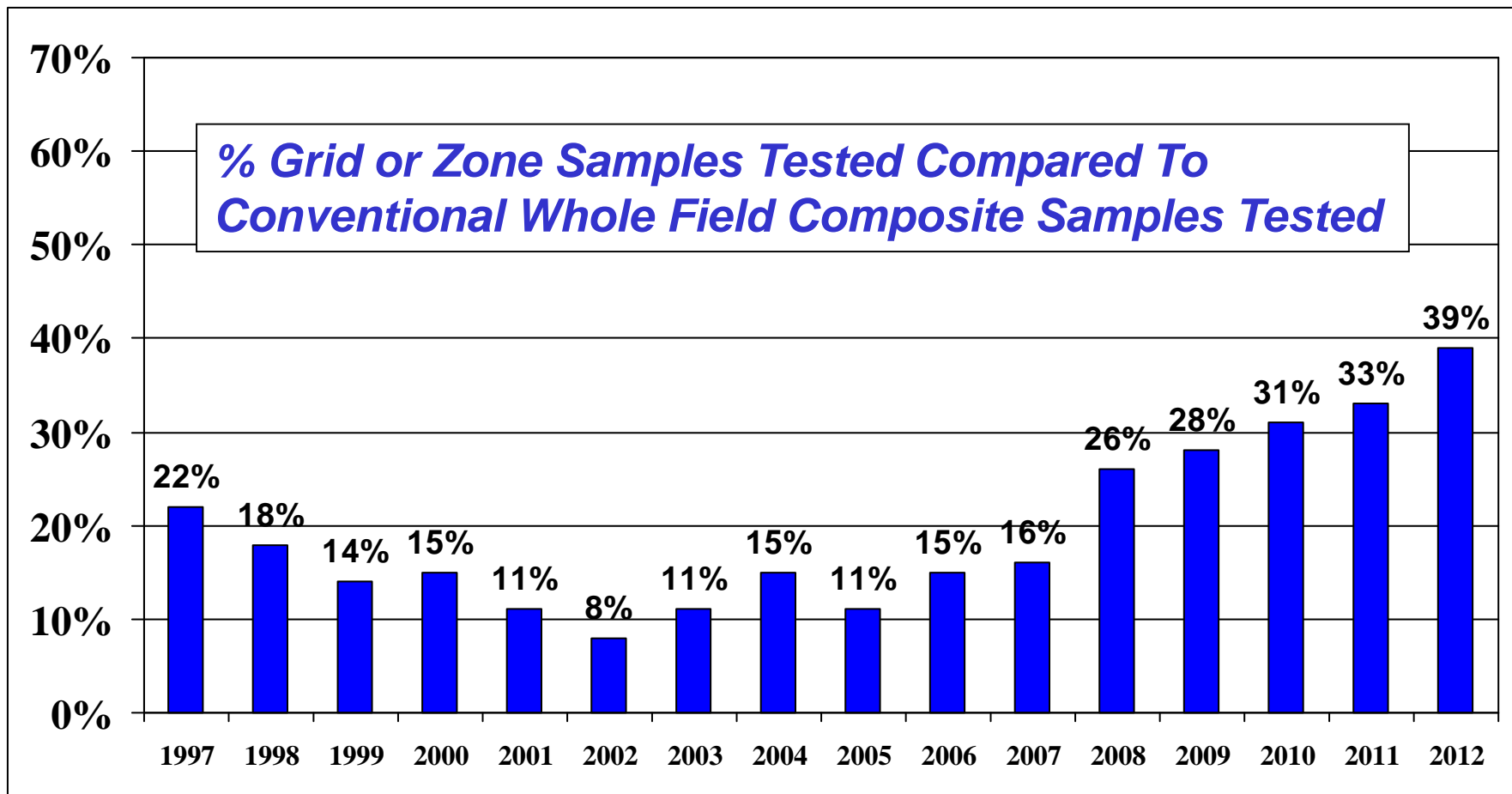
# ***AGVISE Laboratories***

***%Zone or Grid Samples Tested Compared to  
Conventional Whole Field Composite Samples in 2012***

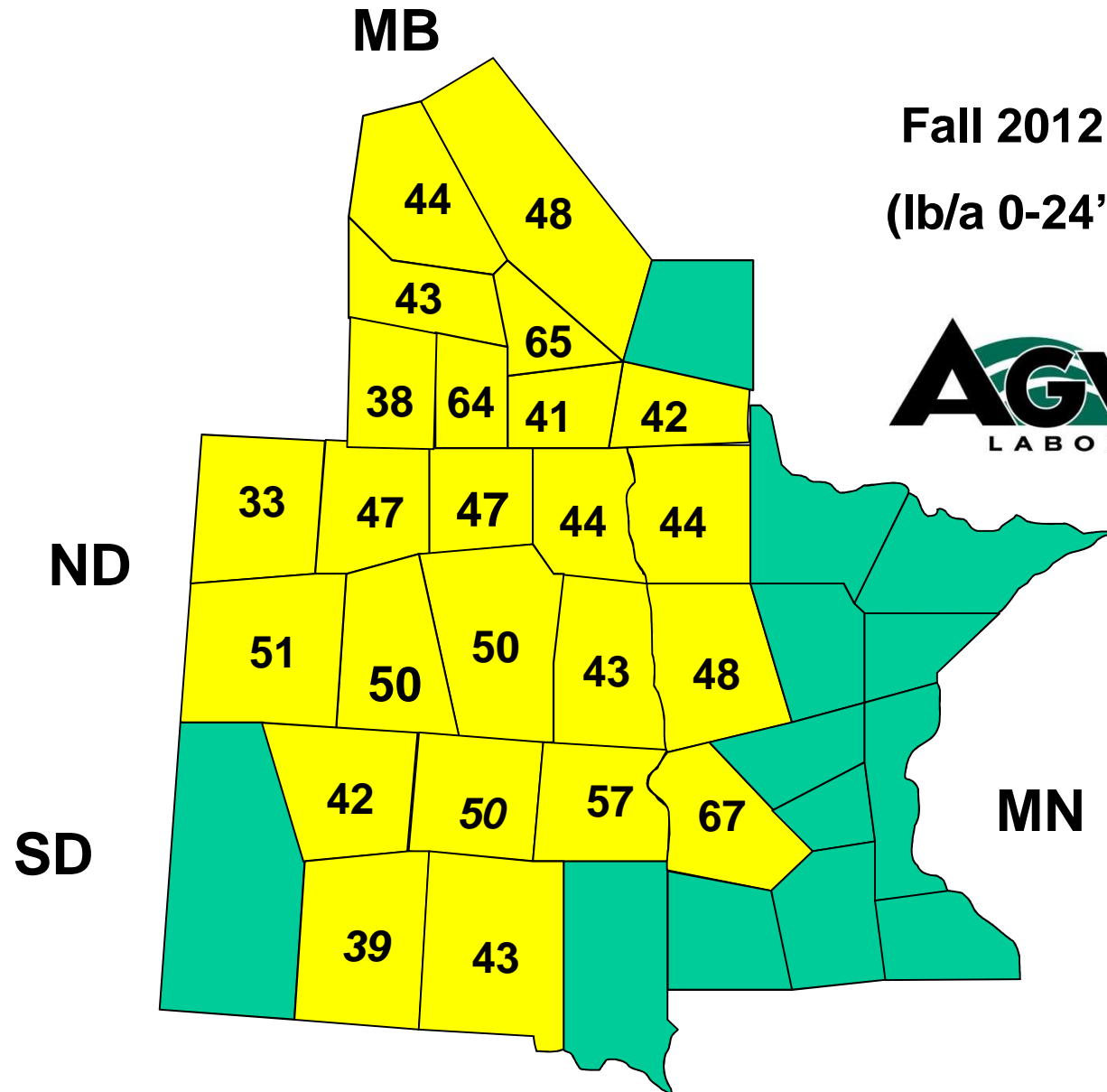


# ***AGVISE Laboratories***

***%Zone or Grid Samples – Northwood laboratory  
1997 - 2012***



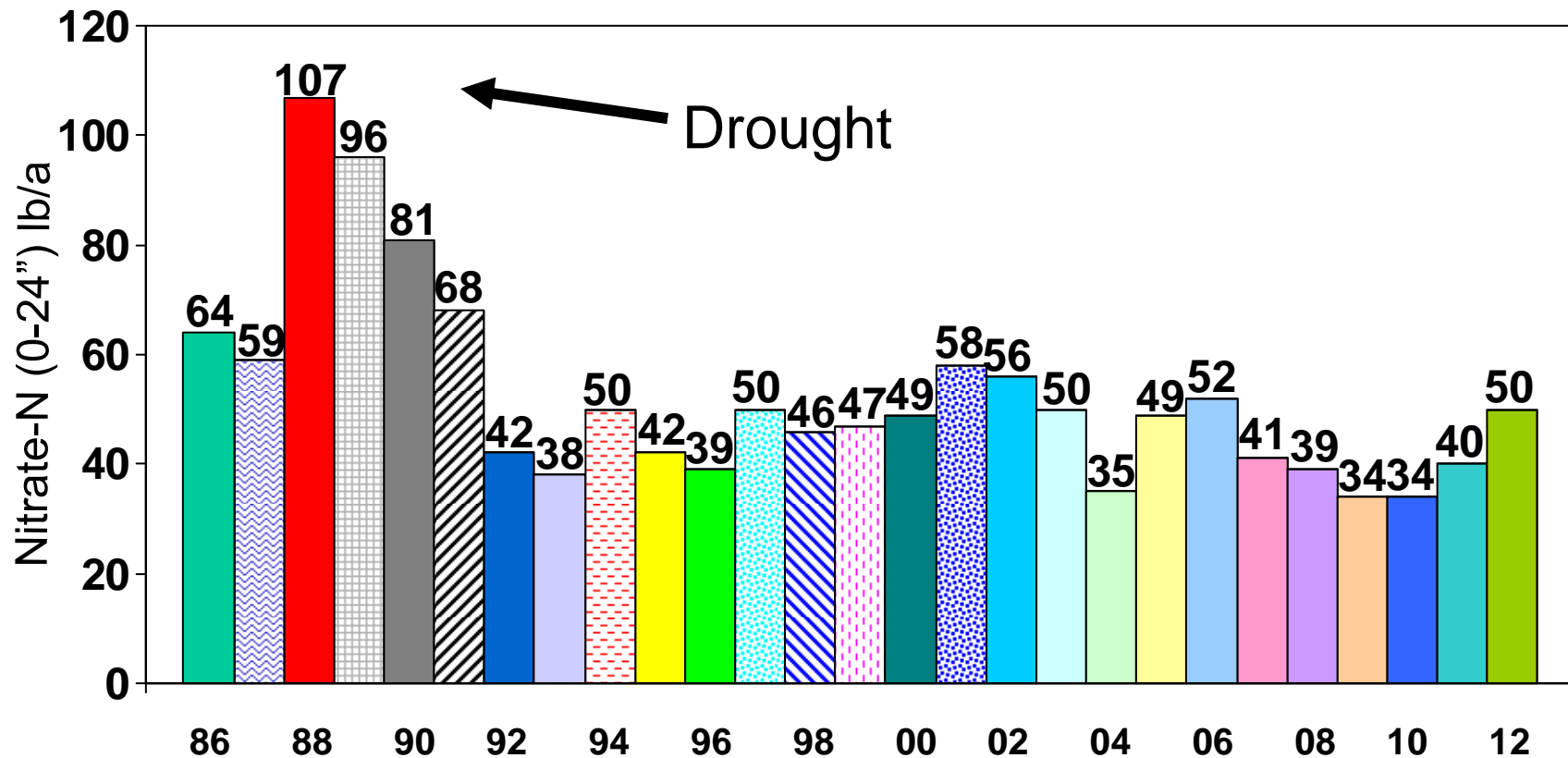
# Average Soil Nitrate following Wheat in 2012



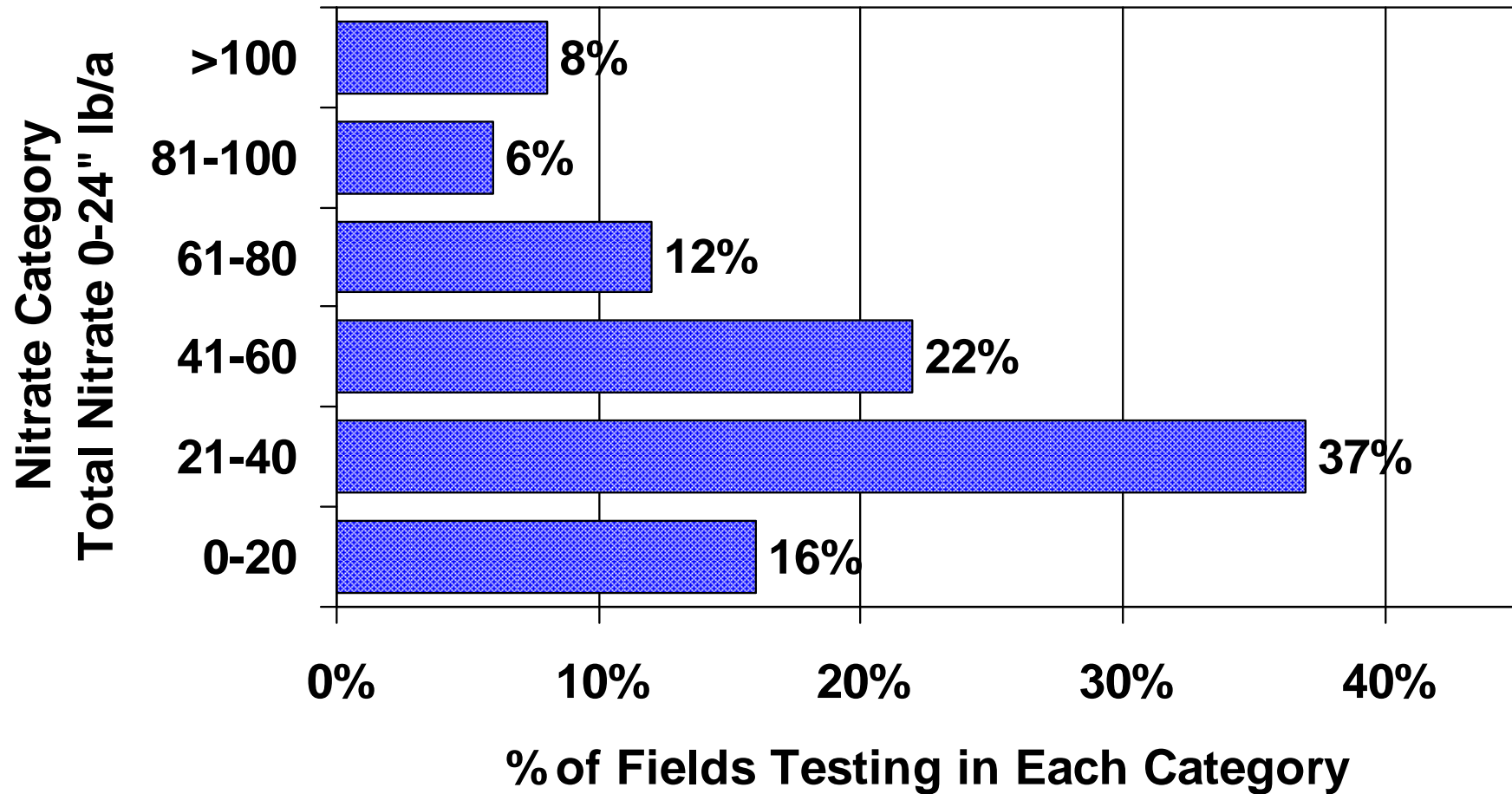
Fall 2012 Samples  
(lb/a 0-24" samples)



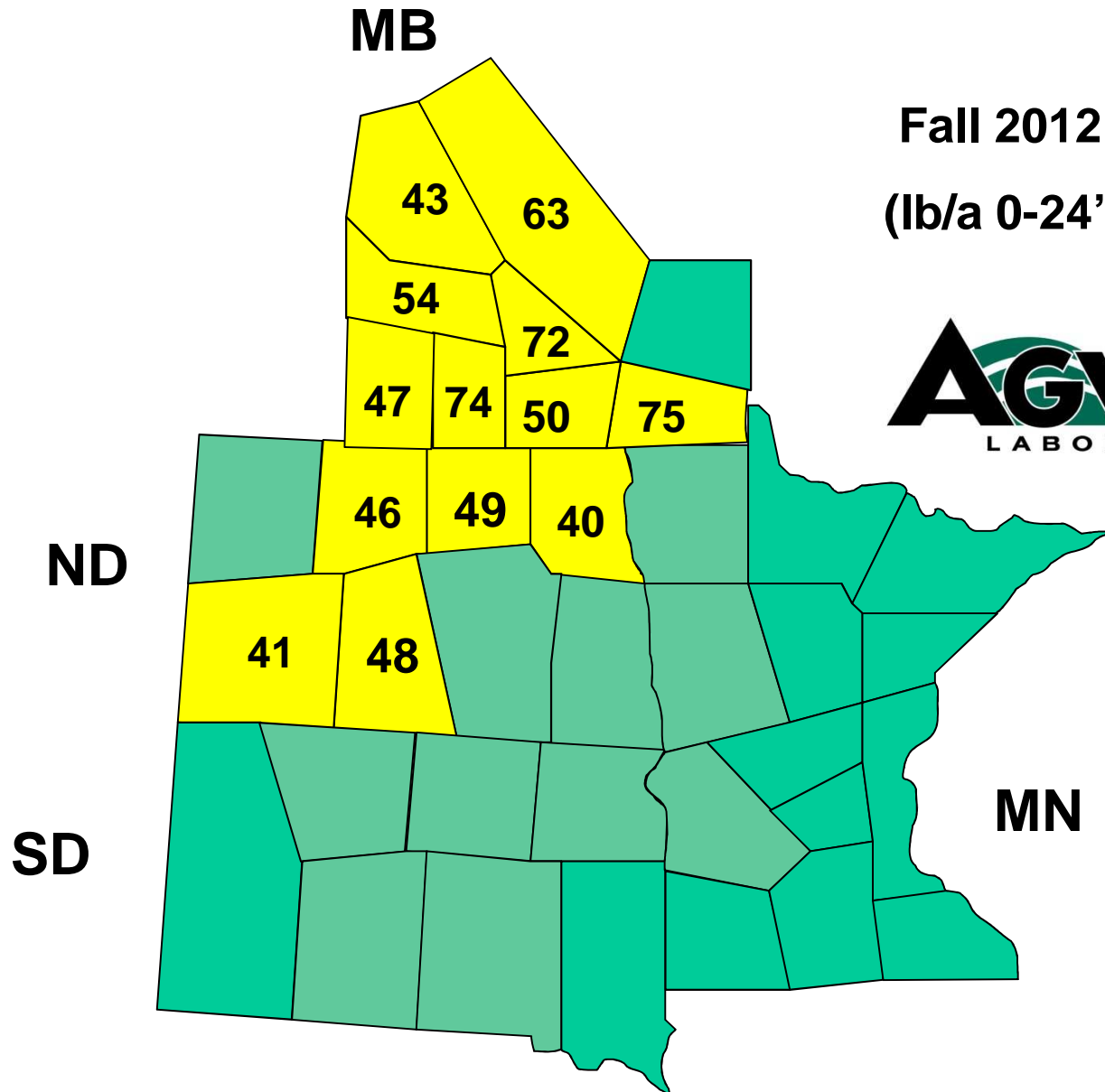
# Average Soil Nitrate Following "WHEAT" in Canada 1986-2012



# ***Soil Nitrate Variability Between Fields Following “Wheat” in Canada - 2012***



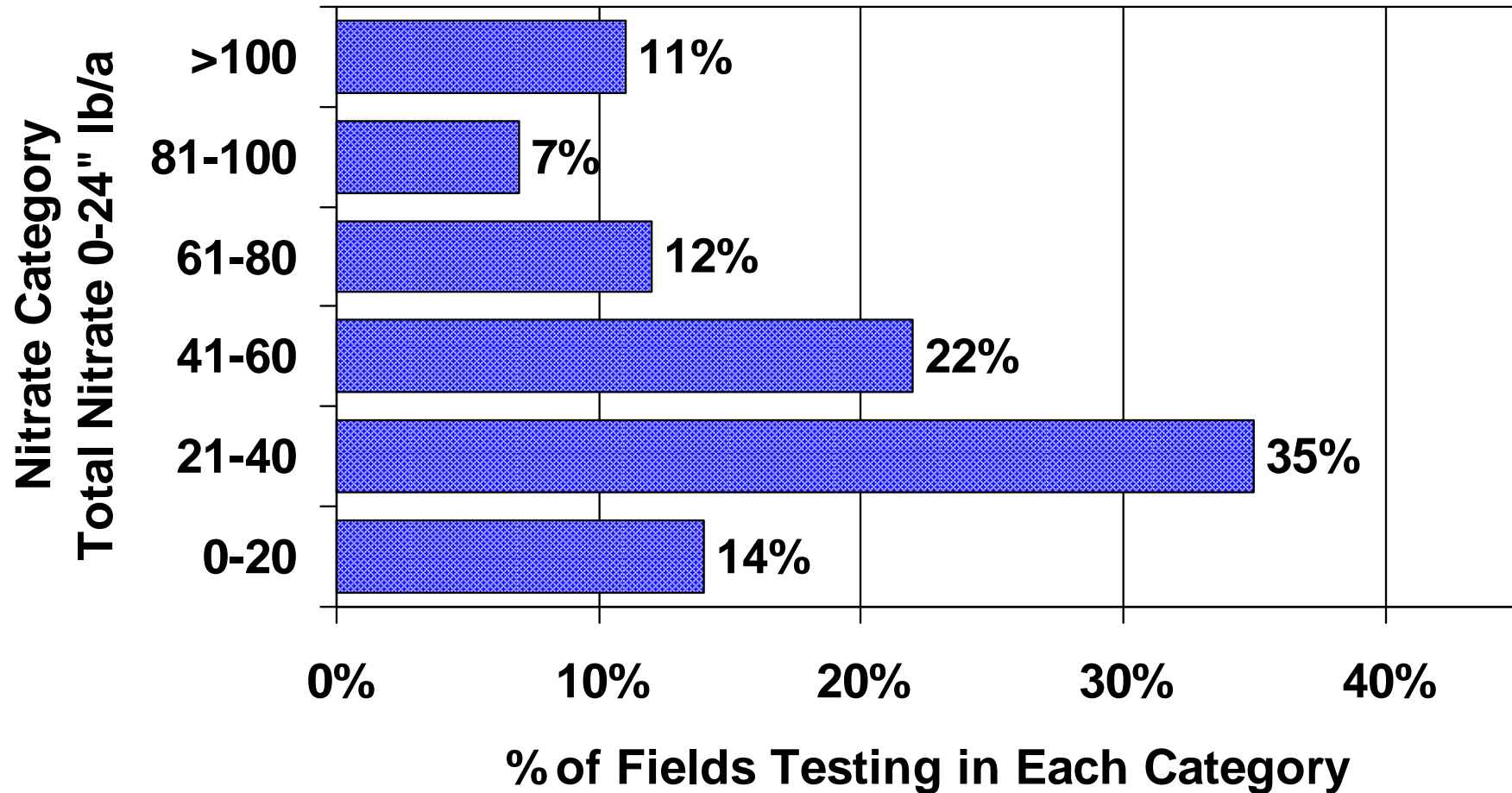
# Average Soil Nitrate following Canola in 2012



Fall 2012 Samples  
(lb/a 0-24" samples)

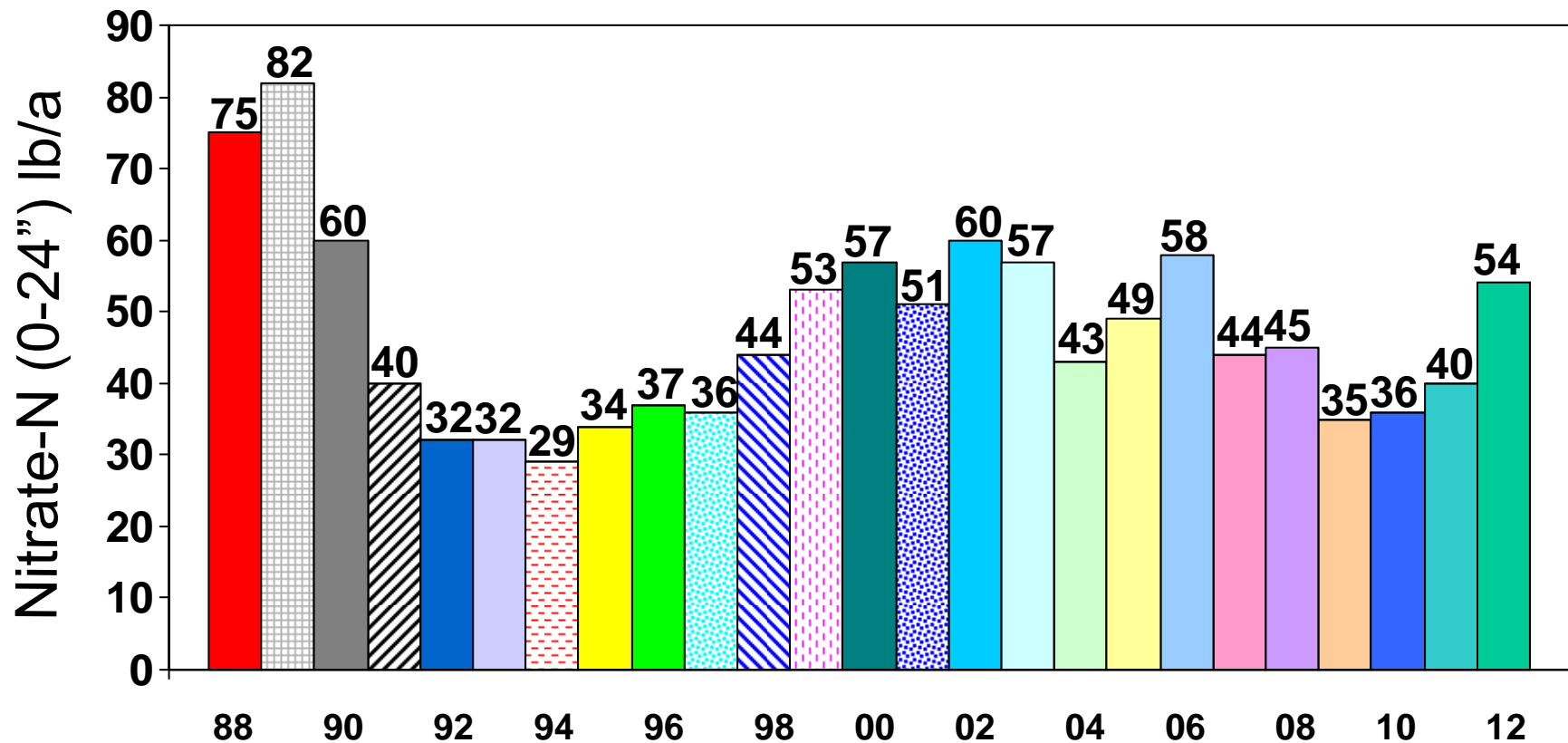


# ***Soil Nitrate Variability Between Fields Following “Canola” in Canada – 2012***

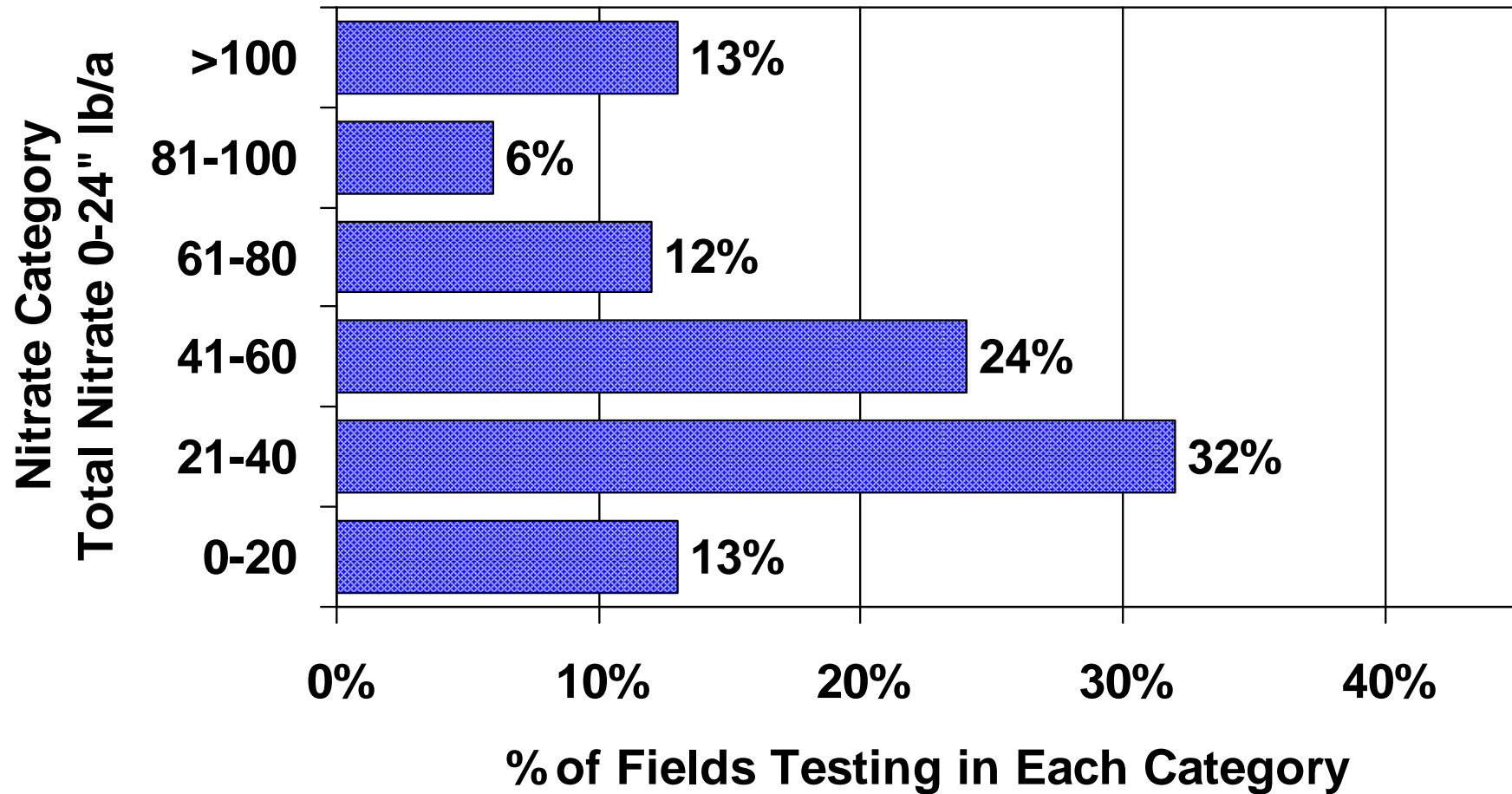




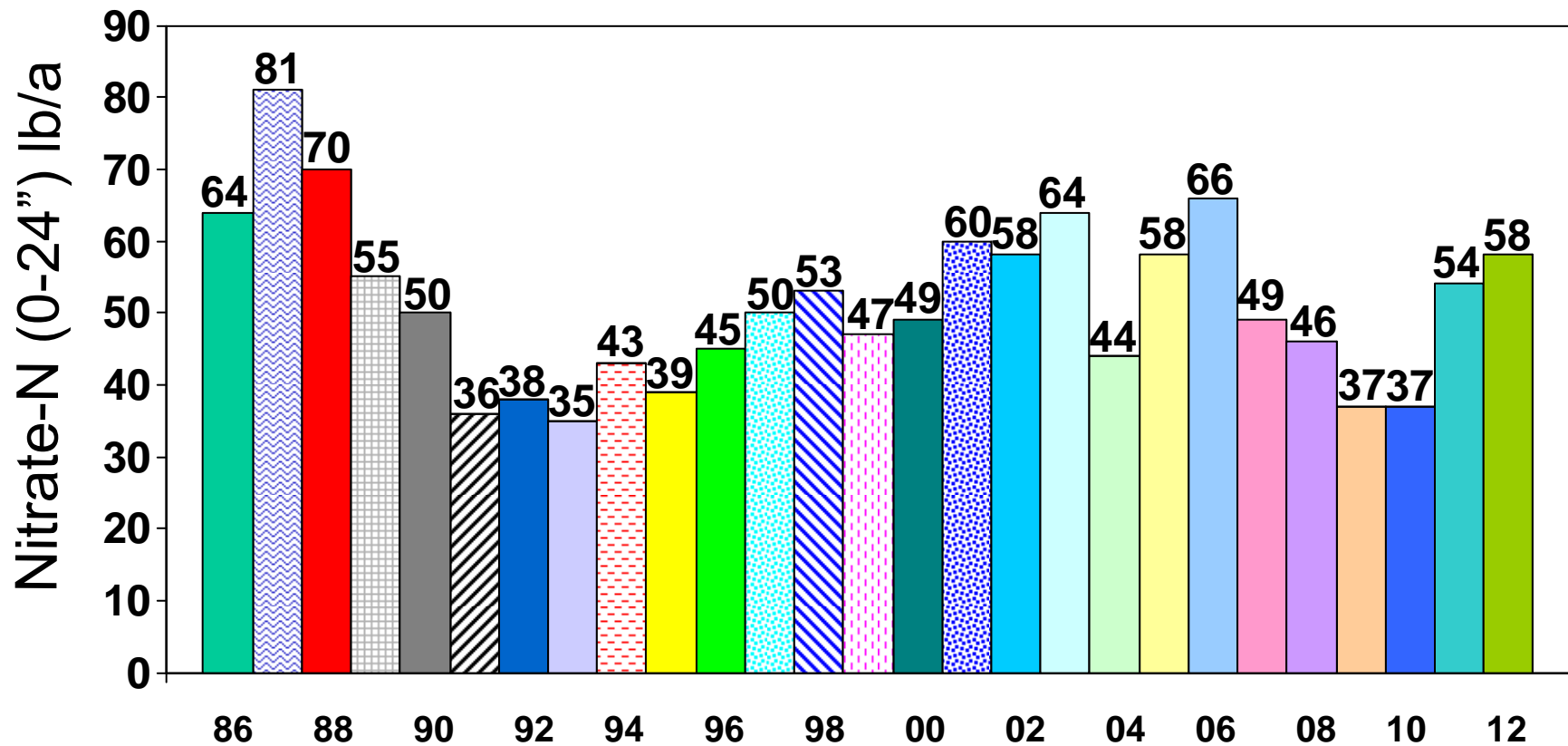
# *Average Soil Nitrate Following “Canola” in Canada 1988-2012*



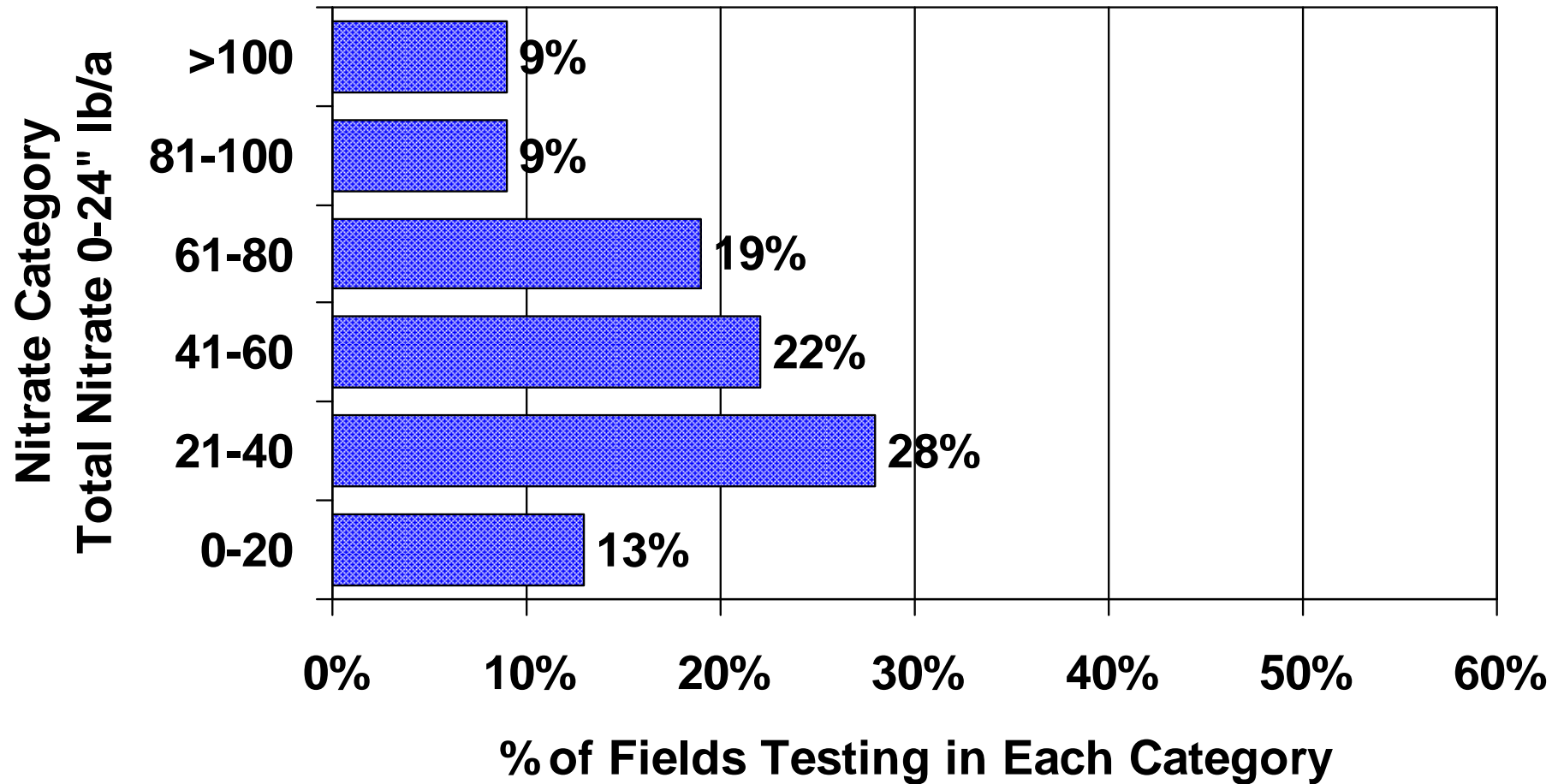
# ***Soil Nitrate Variability Between Fields Following “Barley” in Canada - 2012***



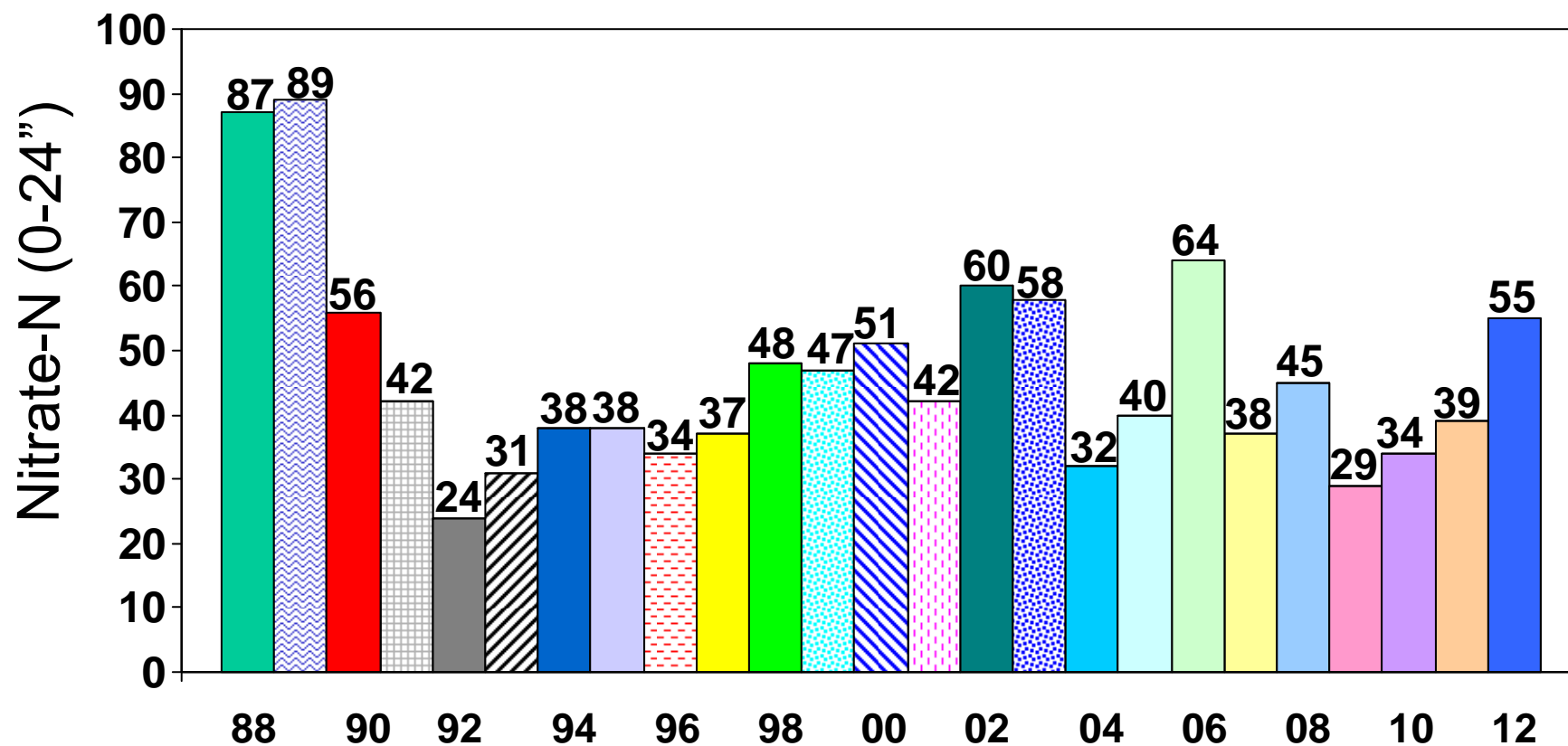
# *Average Soil Nitrate Following "BARLEY in Canada 1986-2012*



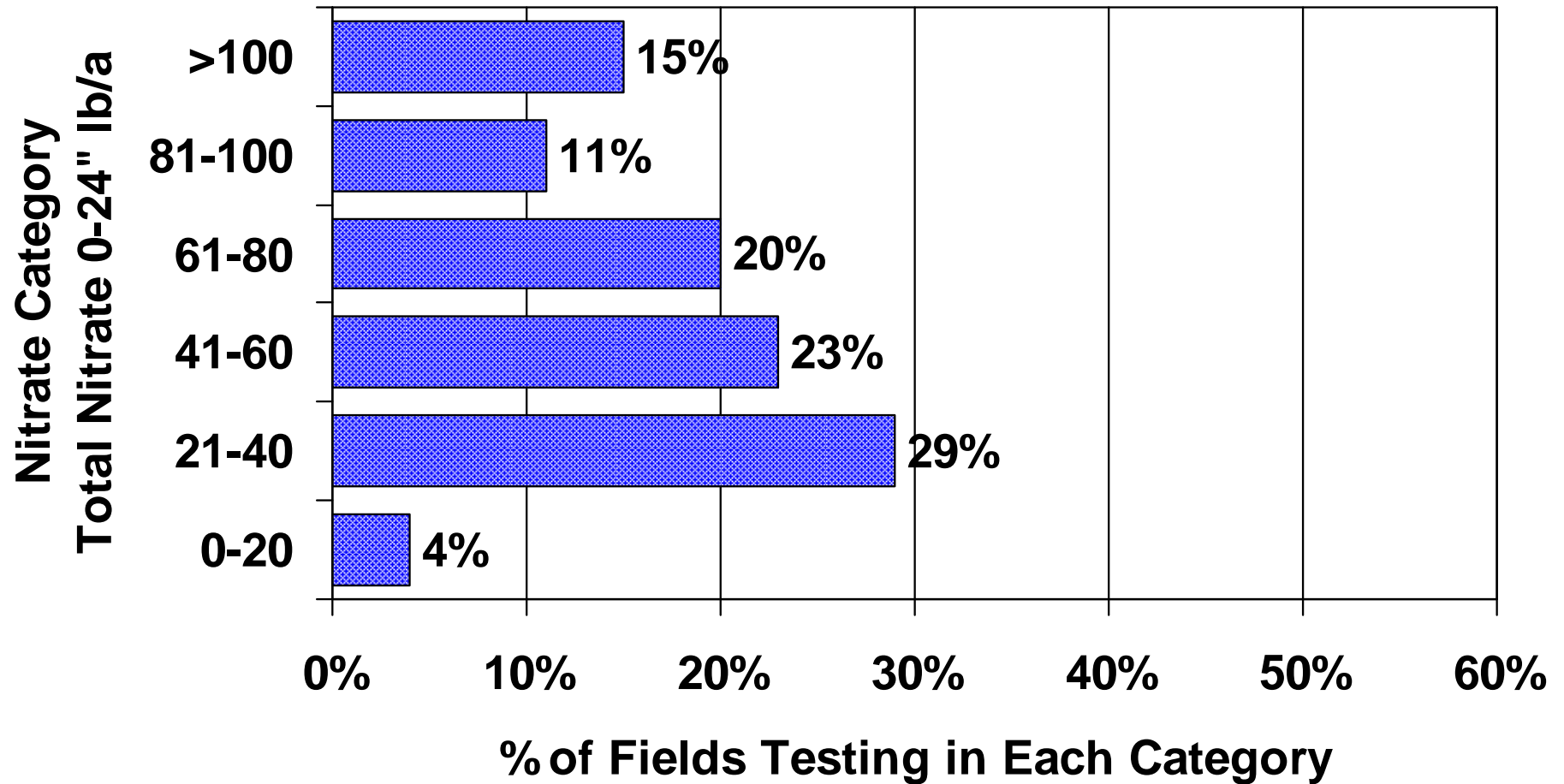
# ***Soil Nitrate Variability Between Fields Following “Flax” in Canada - 2012***



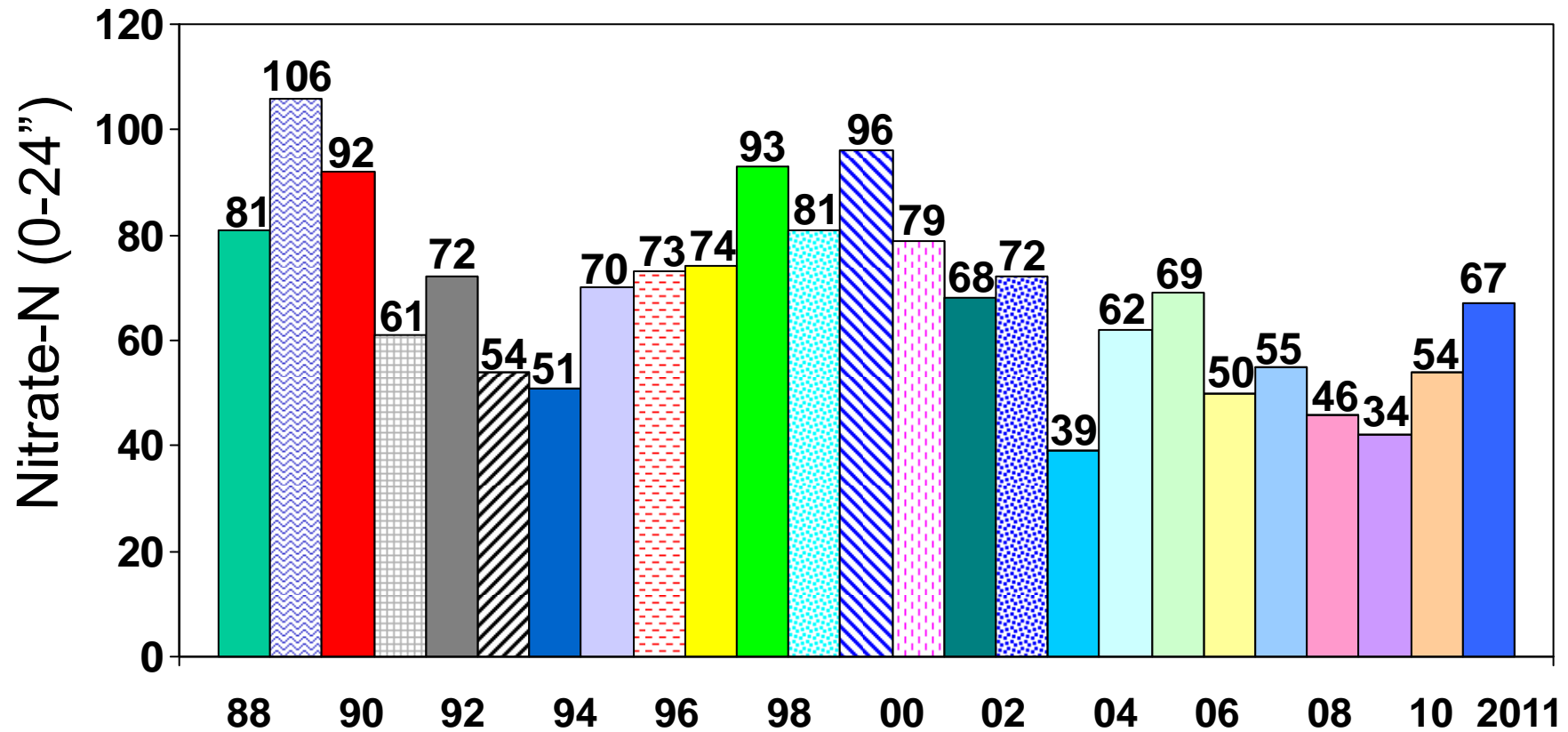
# Average Soil Nitrate Following "FLAX in Canada 1988-2012



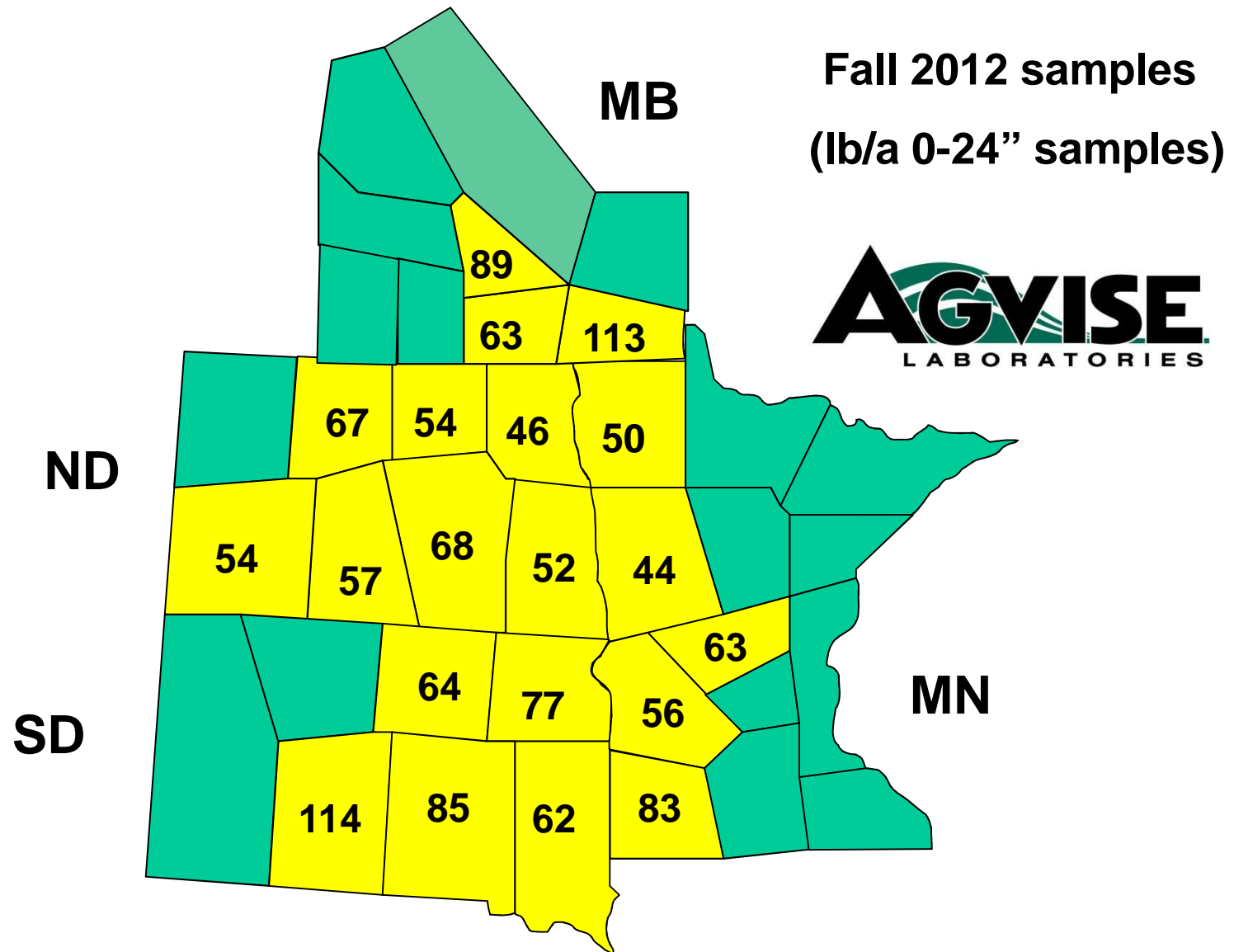
# ***Soil Nitrate Variability Between Fields Following “Potato” in Canada - 2012***



# *Average Soil Nitrate Following “POTATO” in Canada 1988-2012*

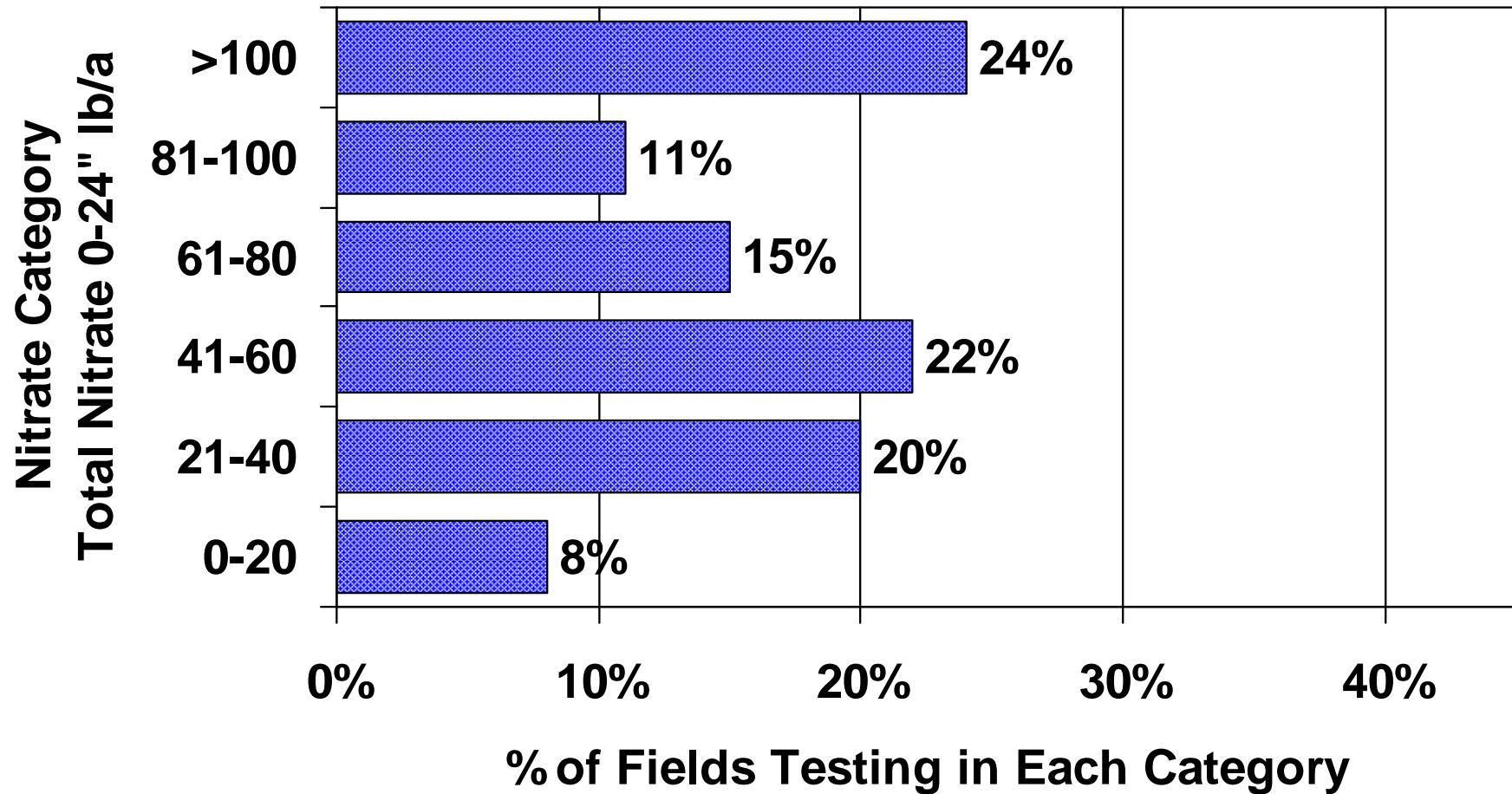


# Average Soil Nitrate following Corn in 2012

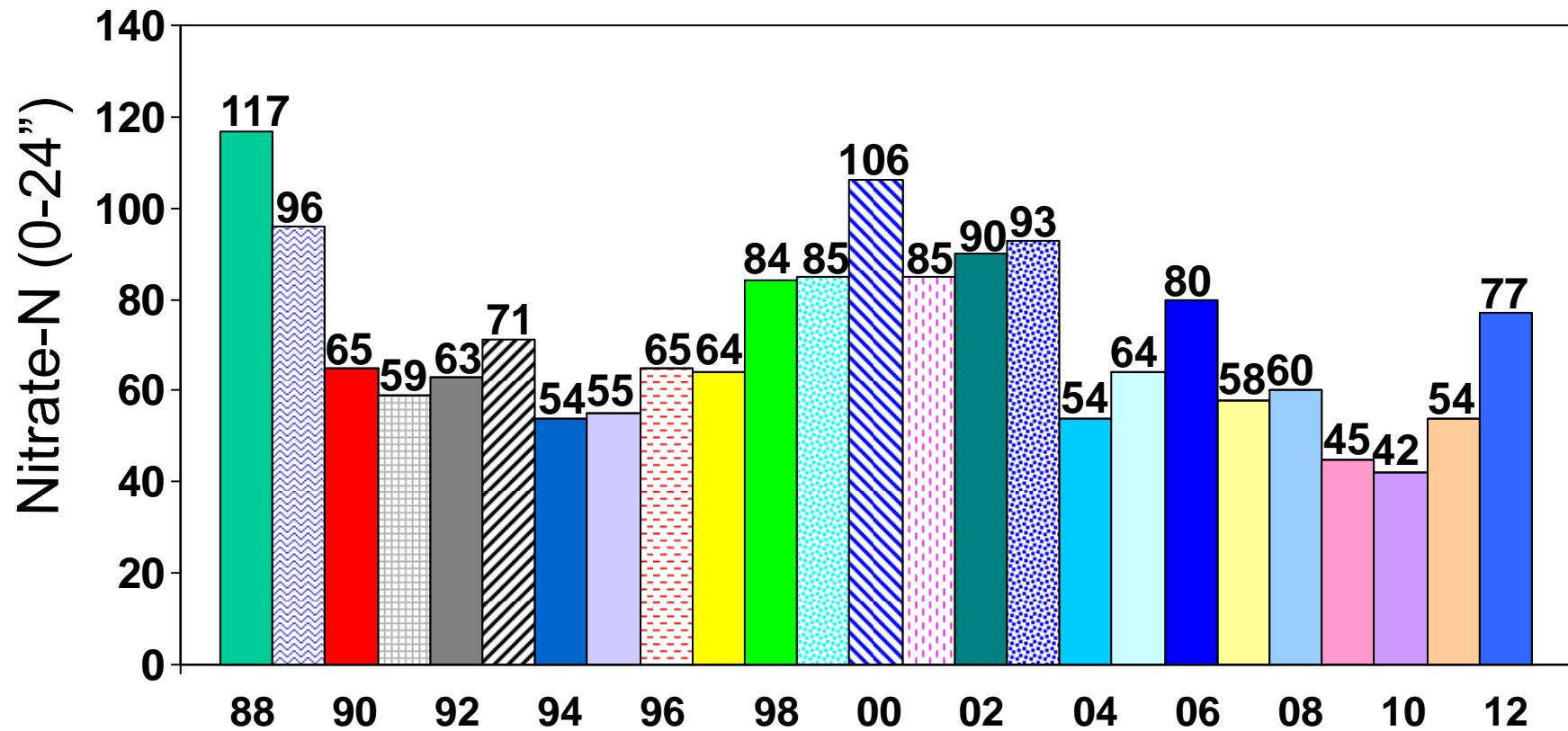




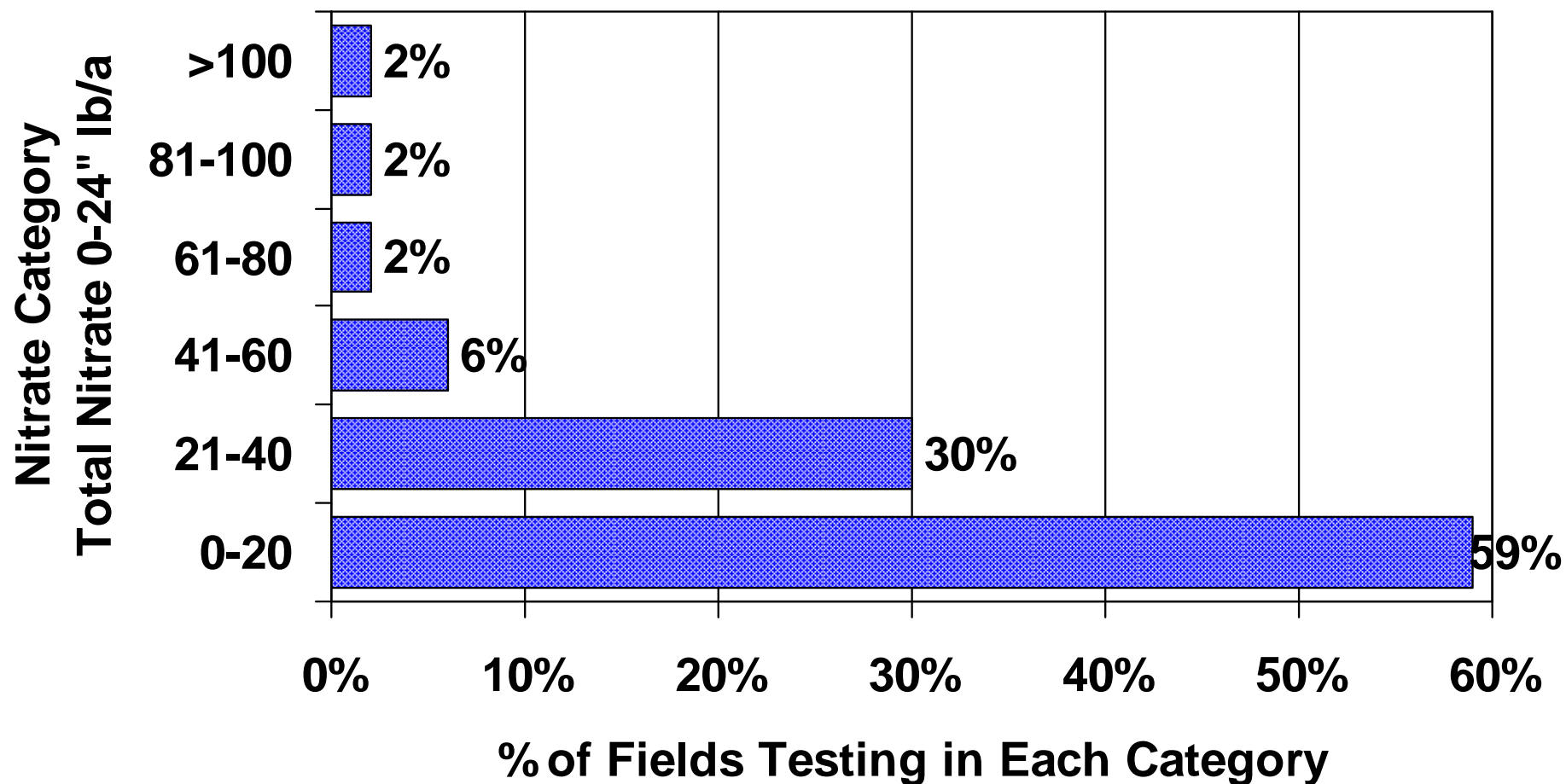
# ***Soil Nitrate Variability Between Fields Following “Corn” in Canada - 2012***



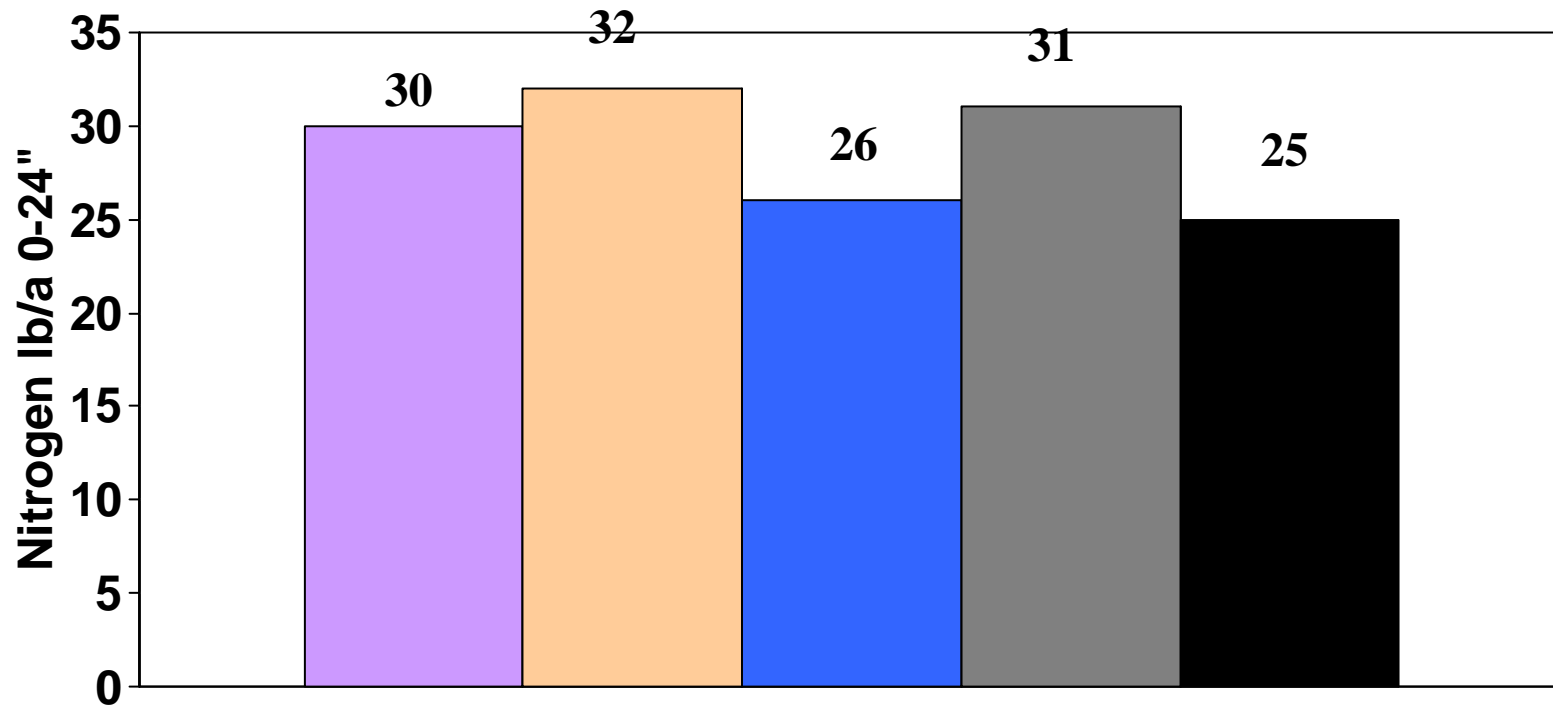
# Average Soil Nitrate Following "CORN in Canada 1988-2012



# ***Soil Nitrate Variability Between Fields Following “Soybean” in Canada 2012***



# *Average Soil Nitrate Following “Soybeans” in Canada*

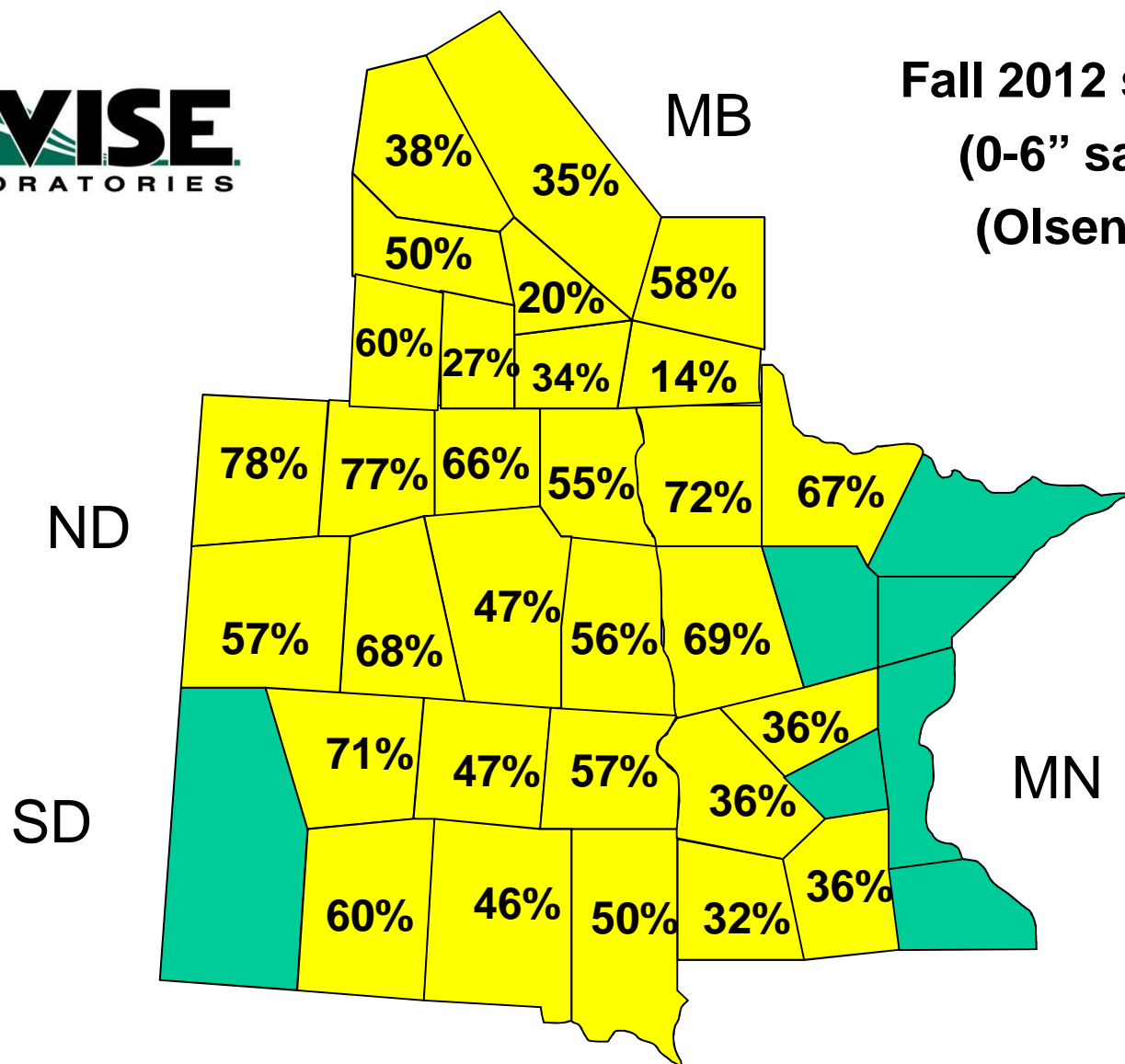


Year	# of Fields Tested
2008	607
2009	827
2010	865
2011	1350
2012	1579

# *% Soil Samples with Phosphorus less than 10 ppm*



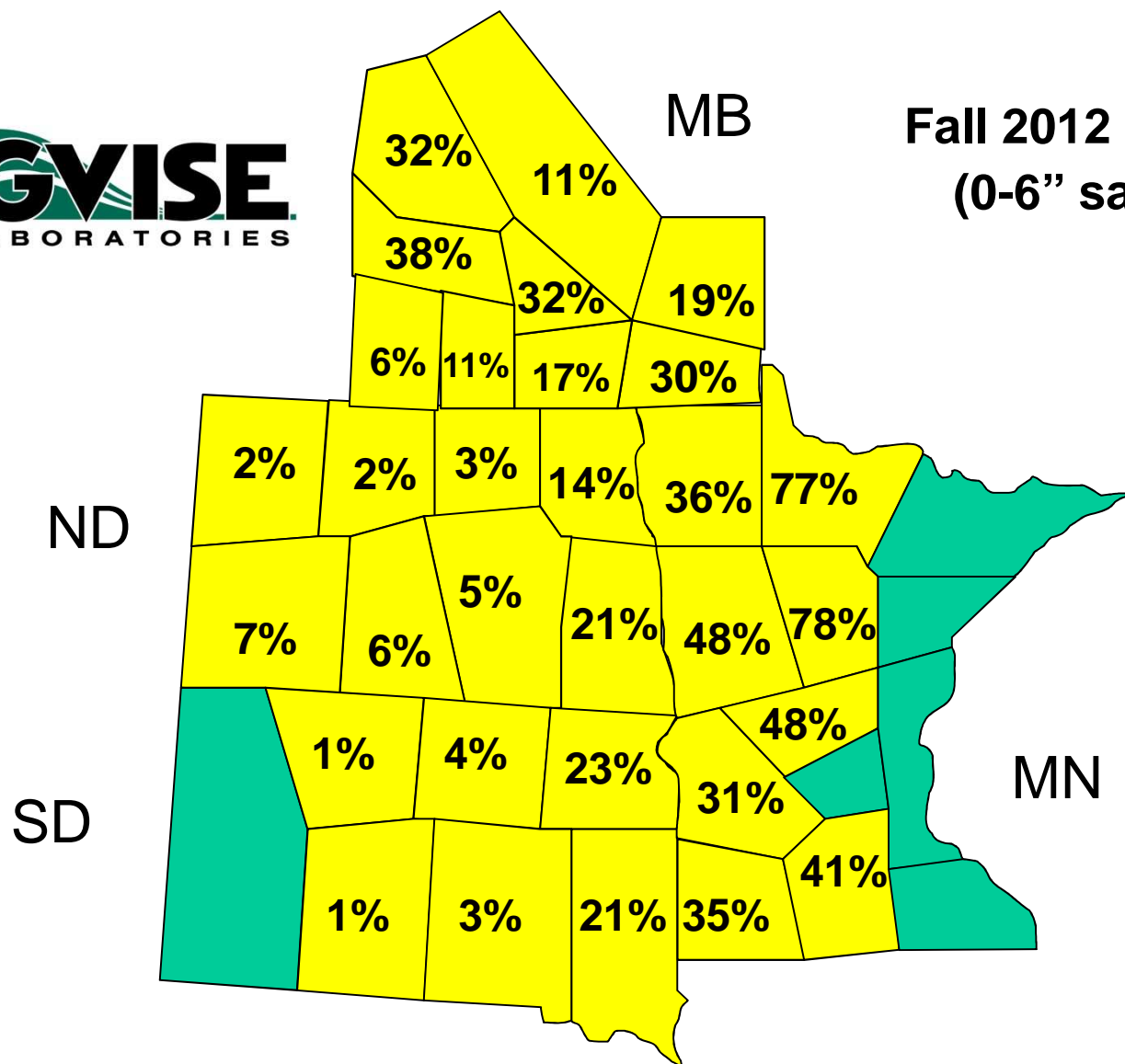
Fall 2012 samples  
(0-6" samples)  
(Olsen P test)



# *% Soil Samples with Potassium less than 150 ppm*



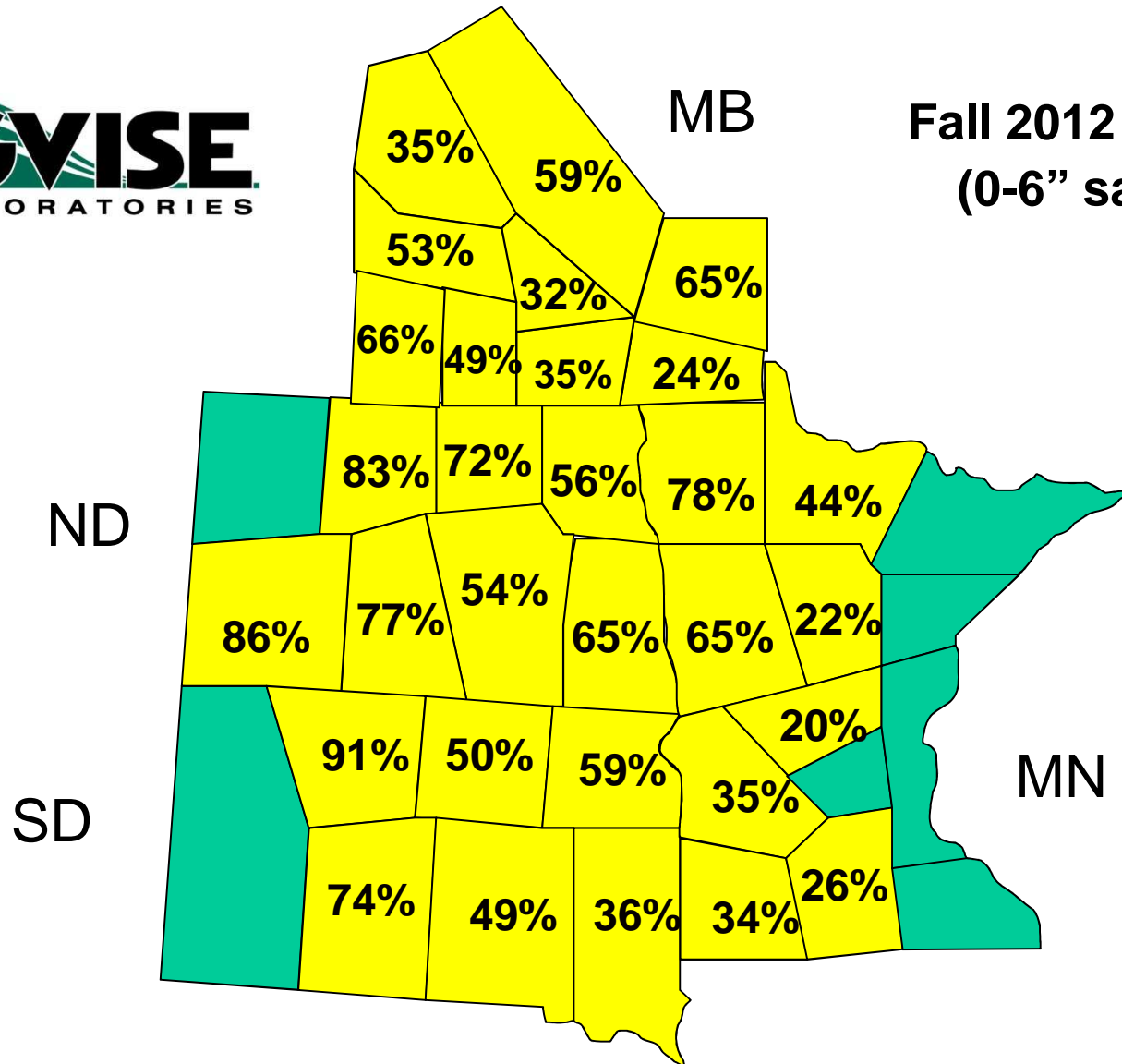
Fall 2012 samples  
(0-6" samples)



# *% Soil Samples with Zinc less than 1.0 ppm*



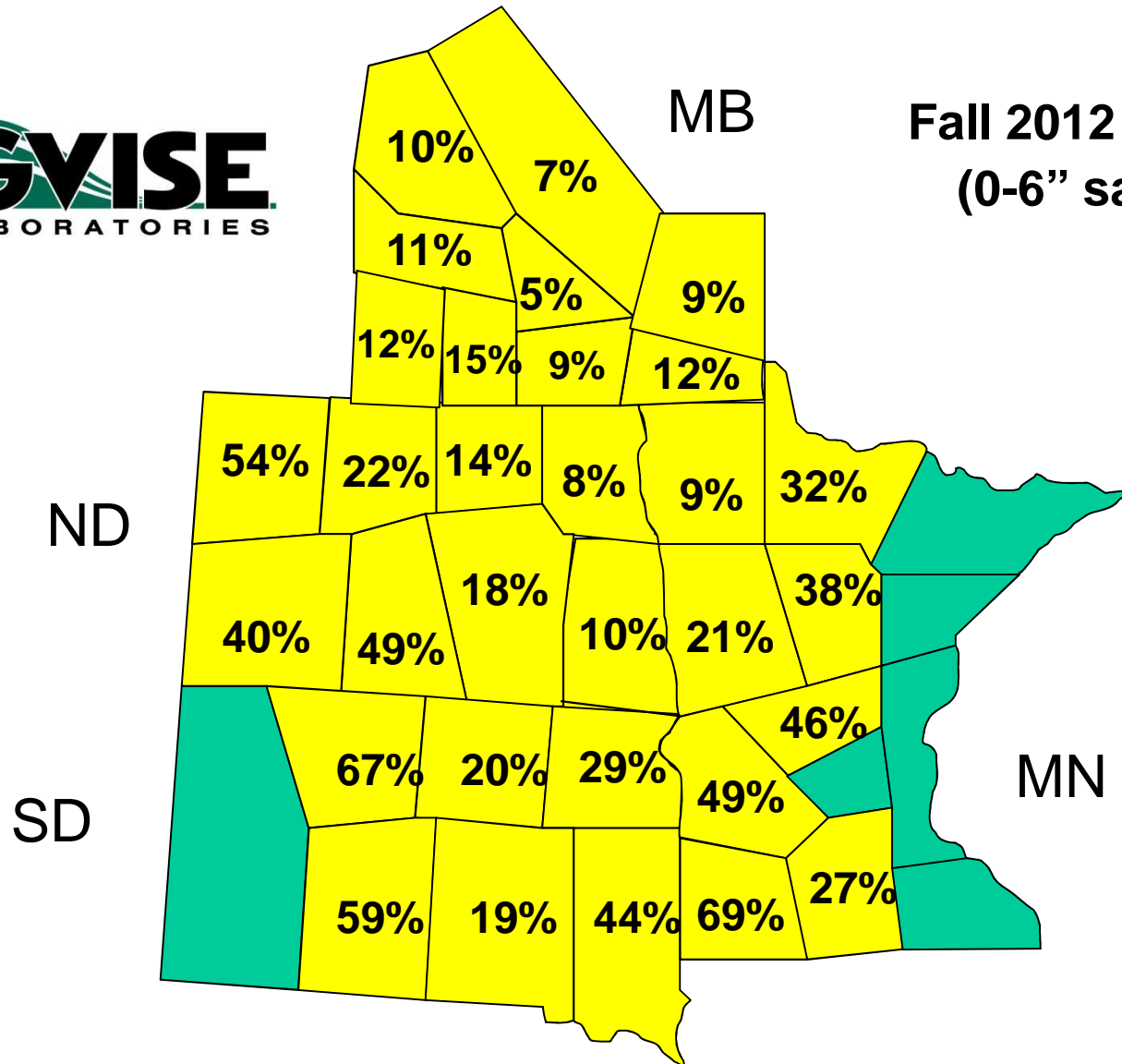
Fall 2012 samples  
(0-6" samples)



# *% Soil Samples with Sulfur less than 15 lb/a*



Fall 2012 samples  
(0-6" samples)

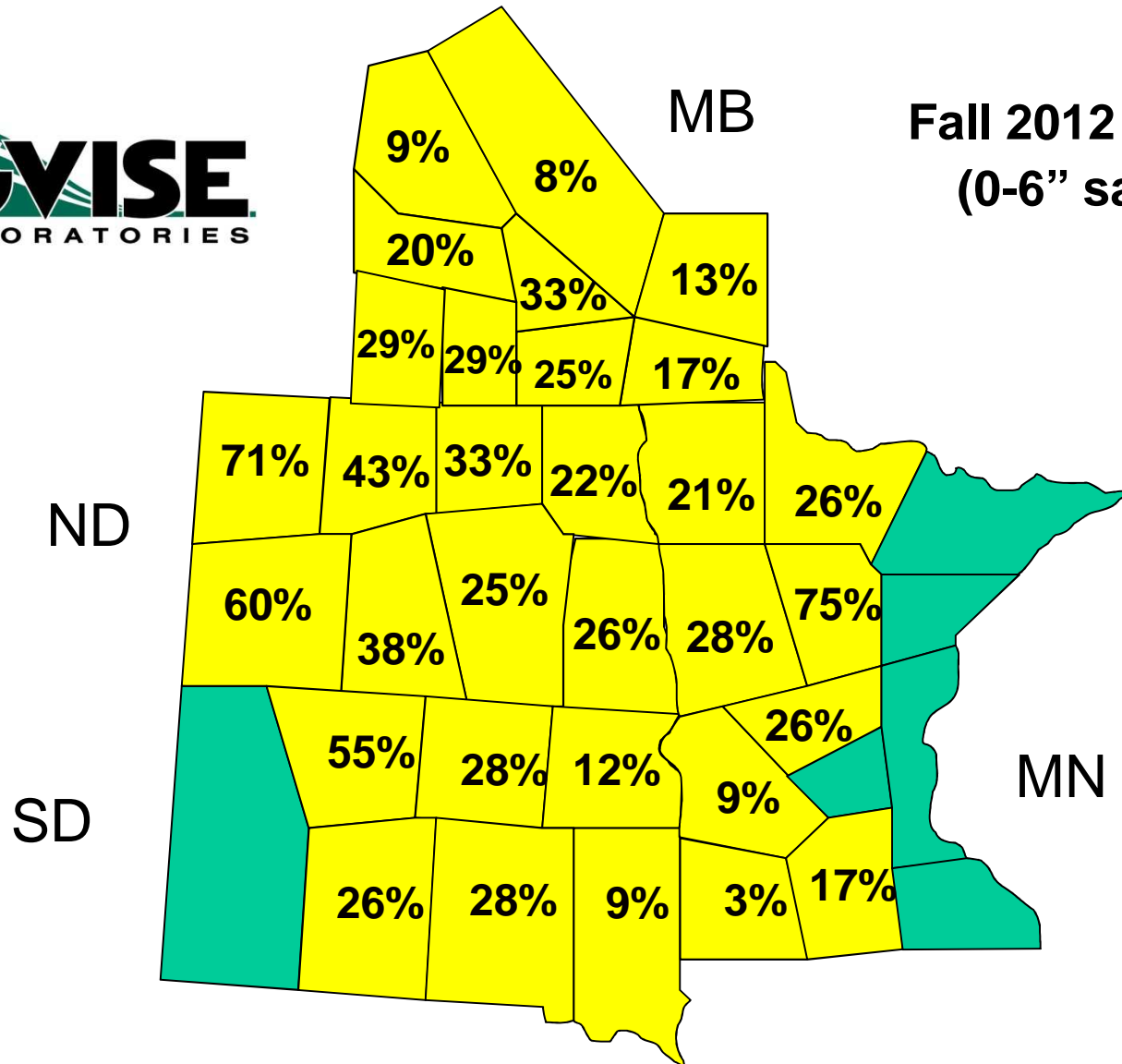




# **% Soil Samples with %OM less than 3.0%**



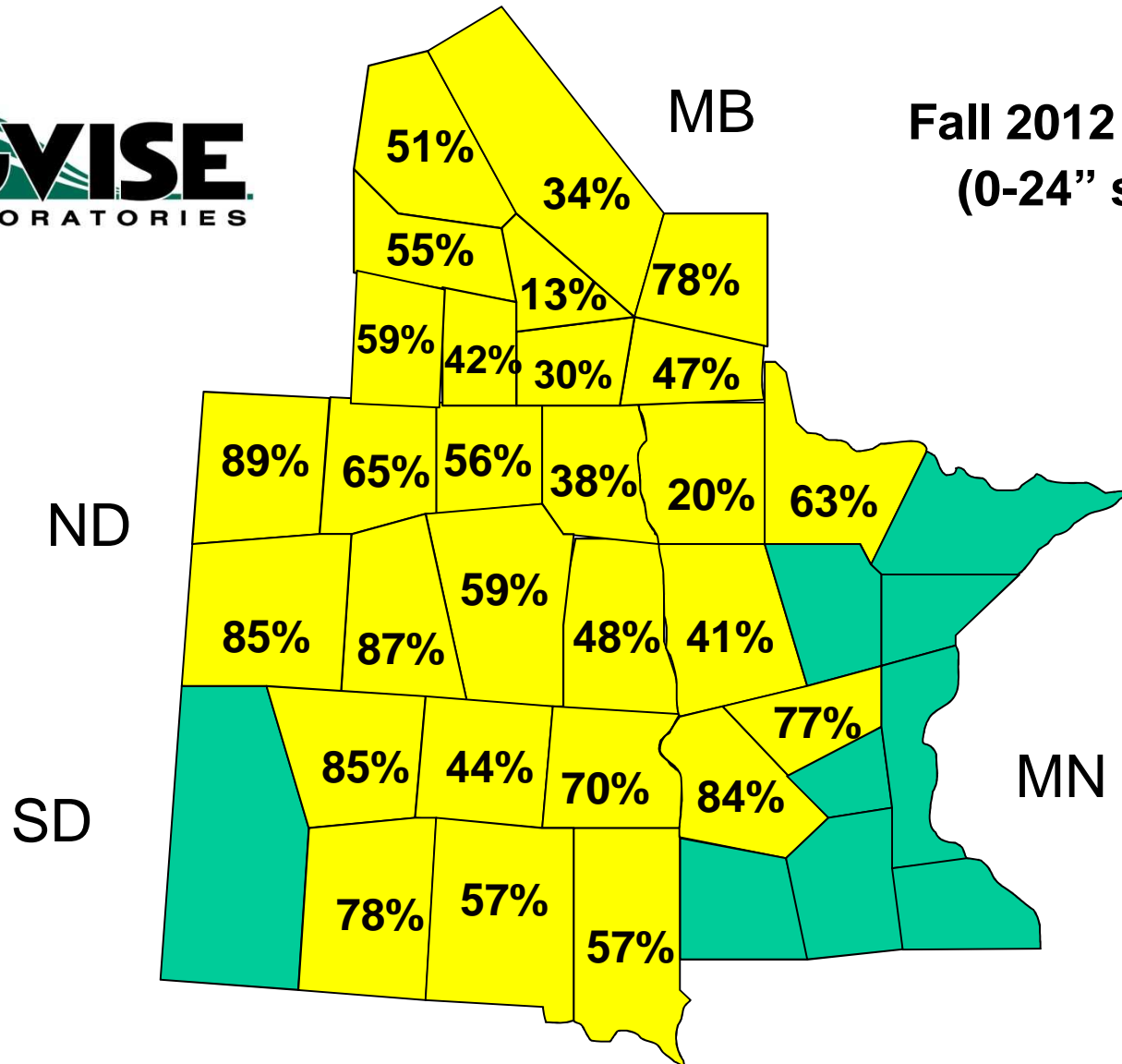
**Fall 2012 Samples  
(0-6" samples)**



# *% Soil Samples with Chloride less than 40 lb/a*



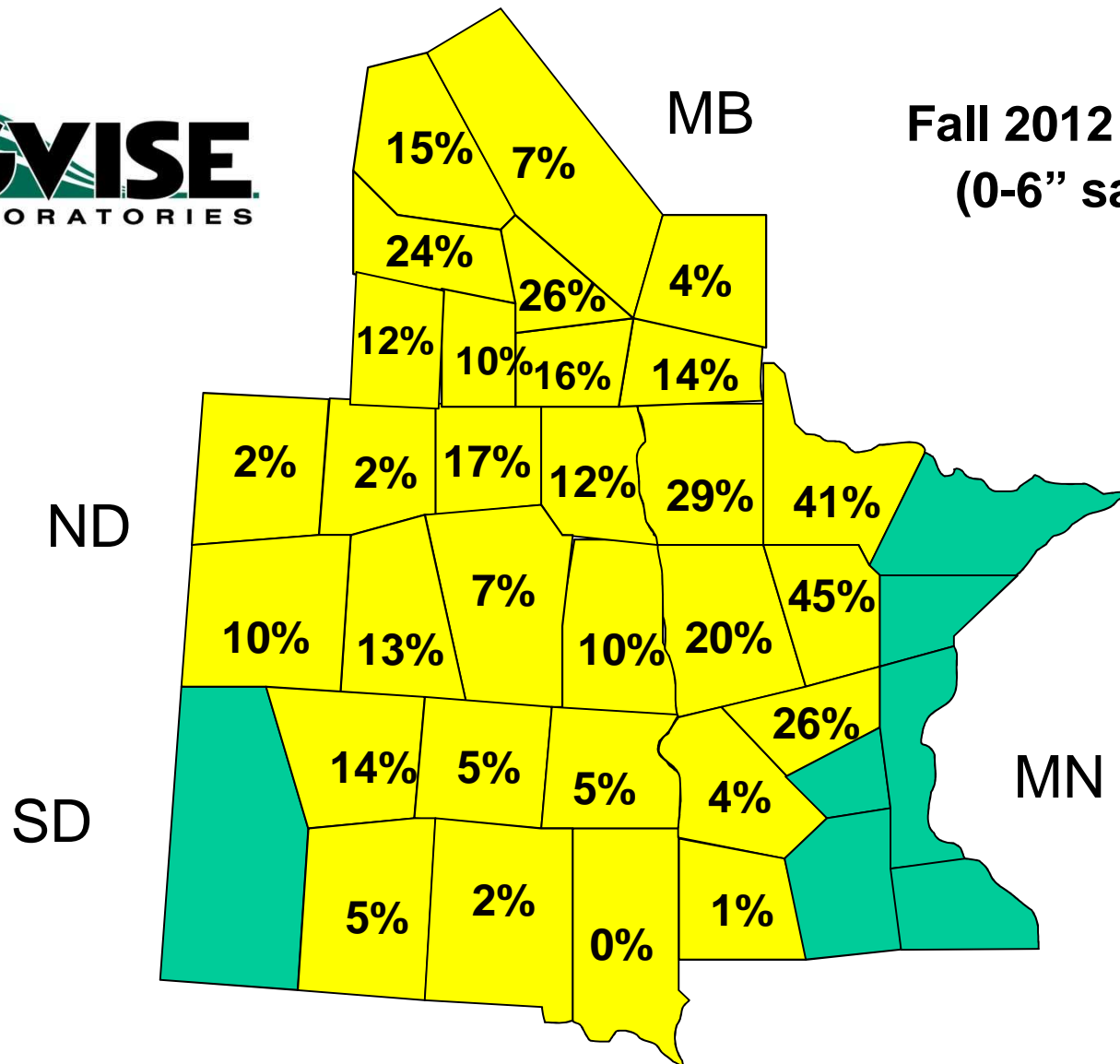
Fall 2012 Samples  
(0-24" samples)



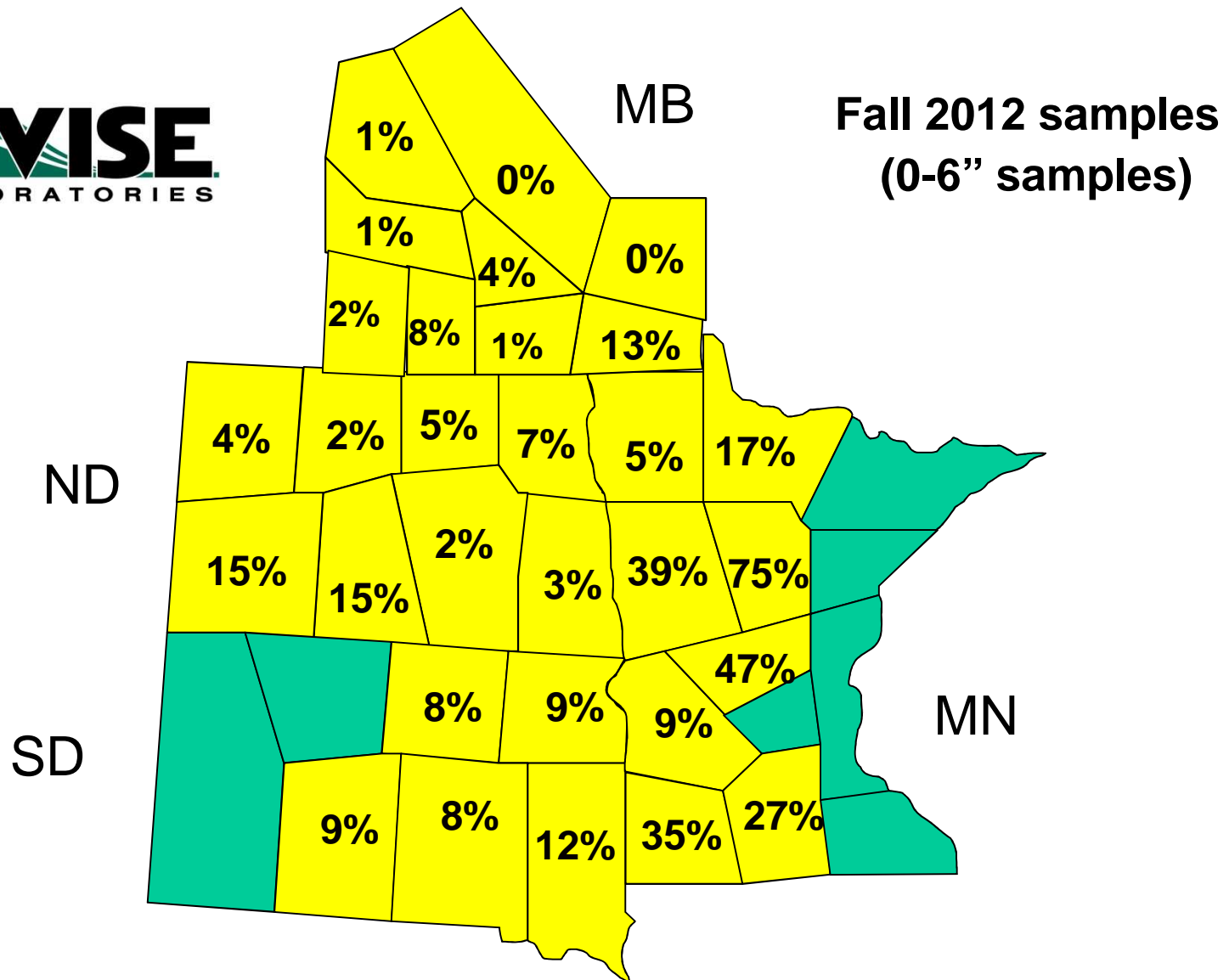
# *% Soil Samples with Copper less than 0.5 ppm*



Fall 2012 samples  
(0-6" samples)



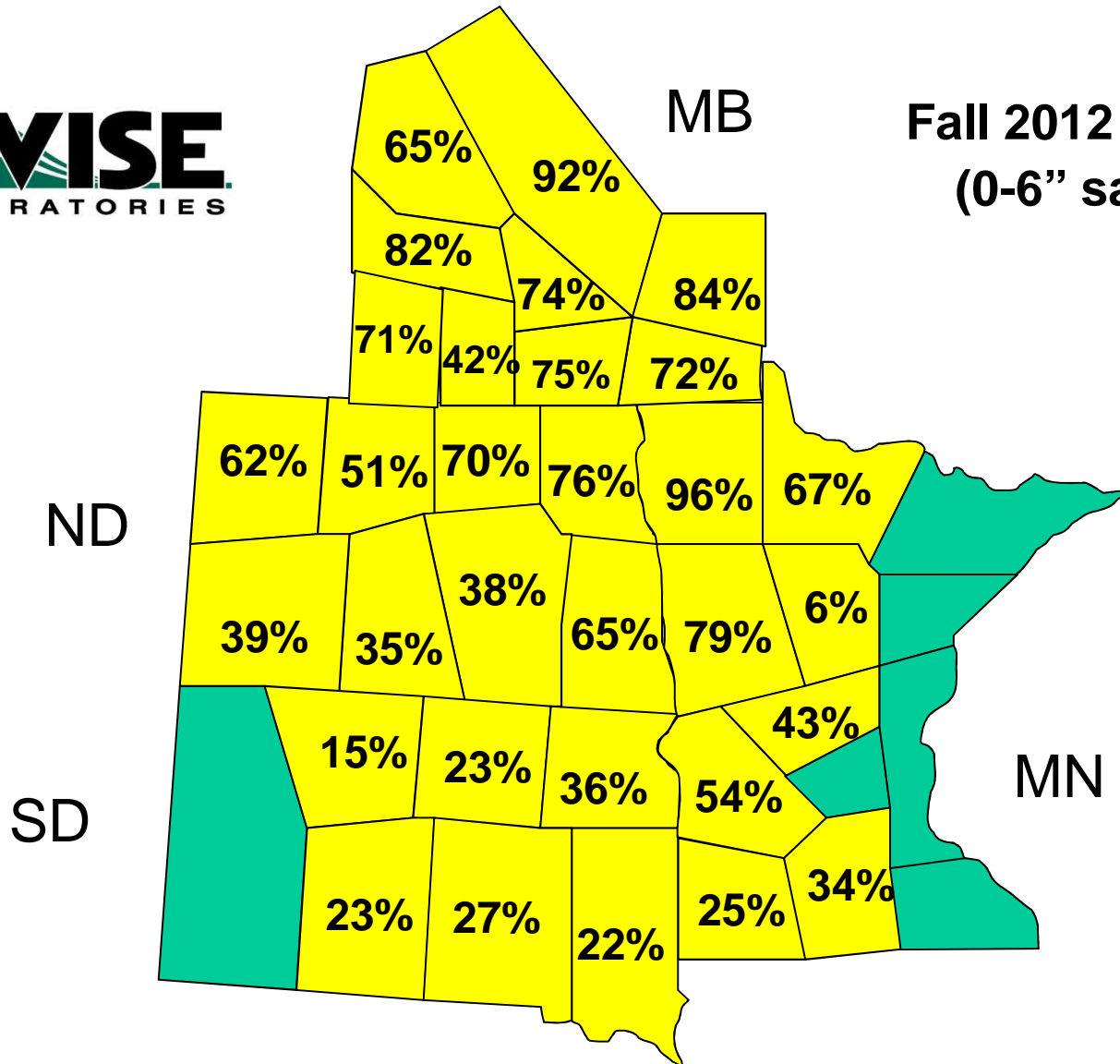
# *% Soil Samples with Boron less than 0.4 ppm*



# *% Soil Samples with Soil pH greater than 7.3*



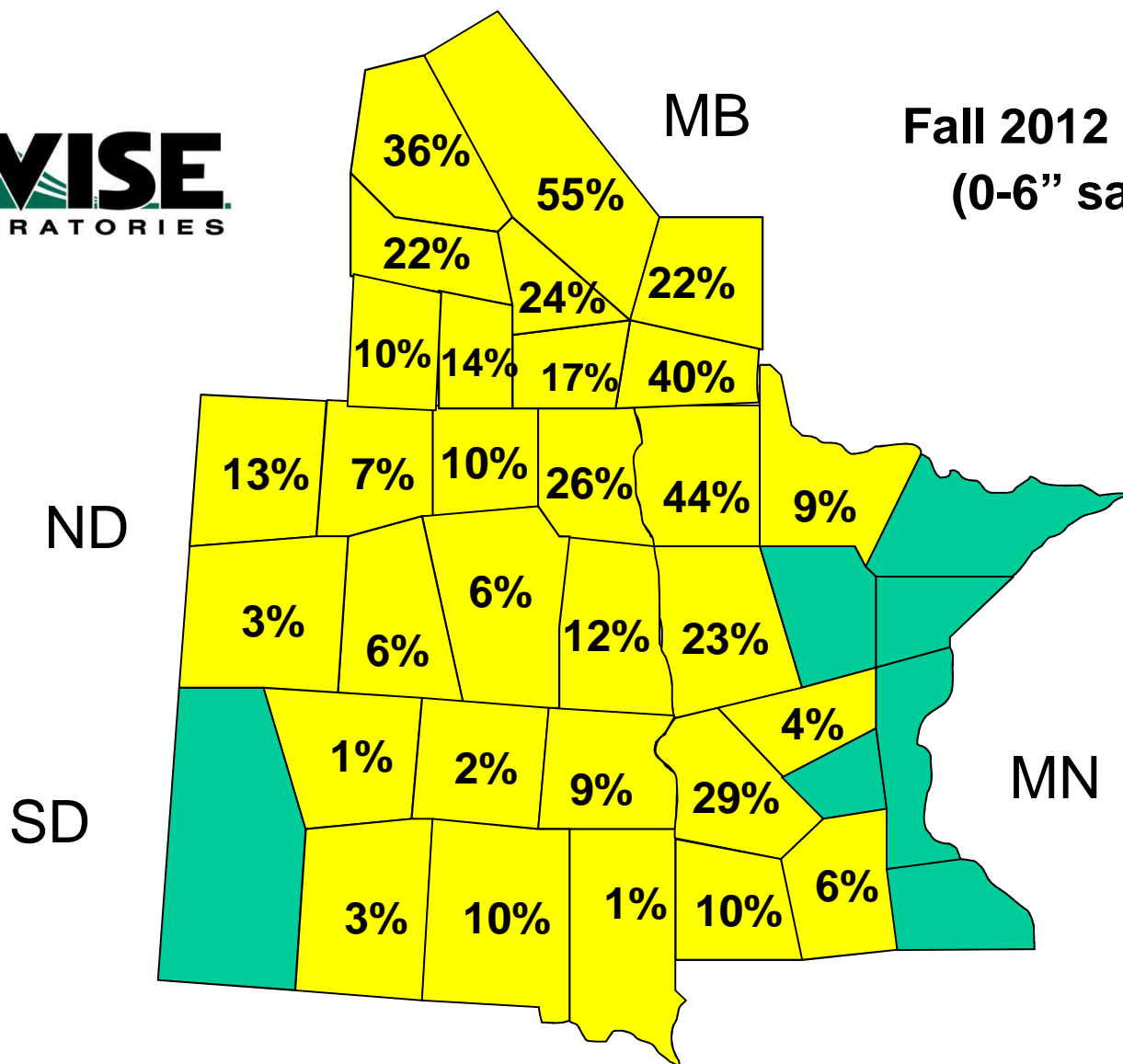
Fall 2012 samples  
(0-6" samples)



# *% Soil Samples with Carbonate greater than 5.0%*



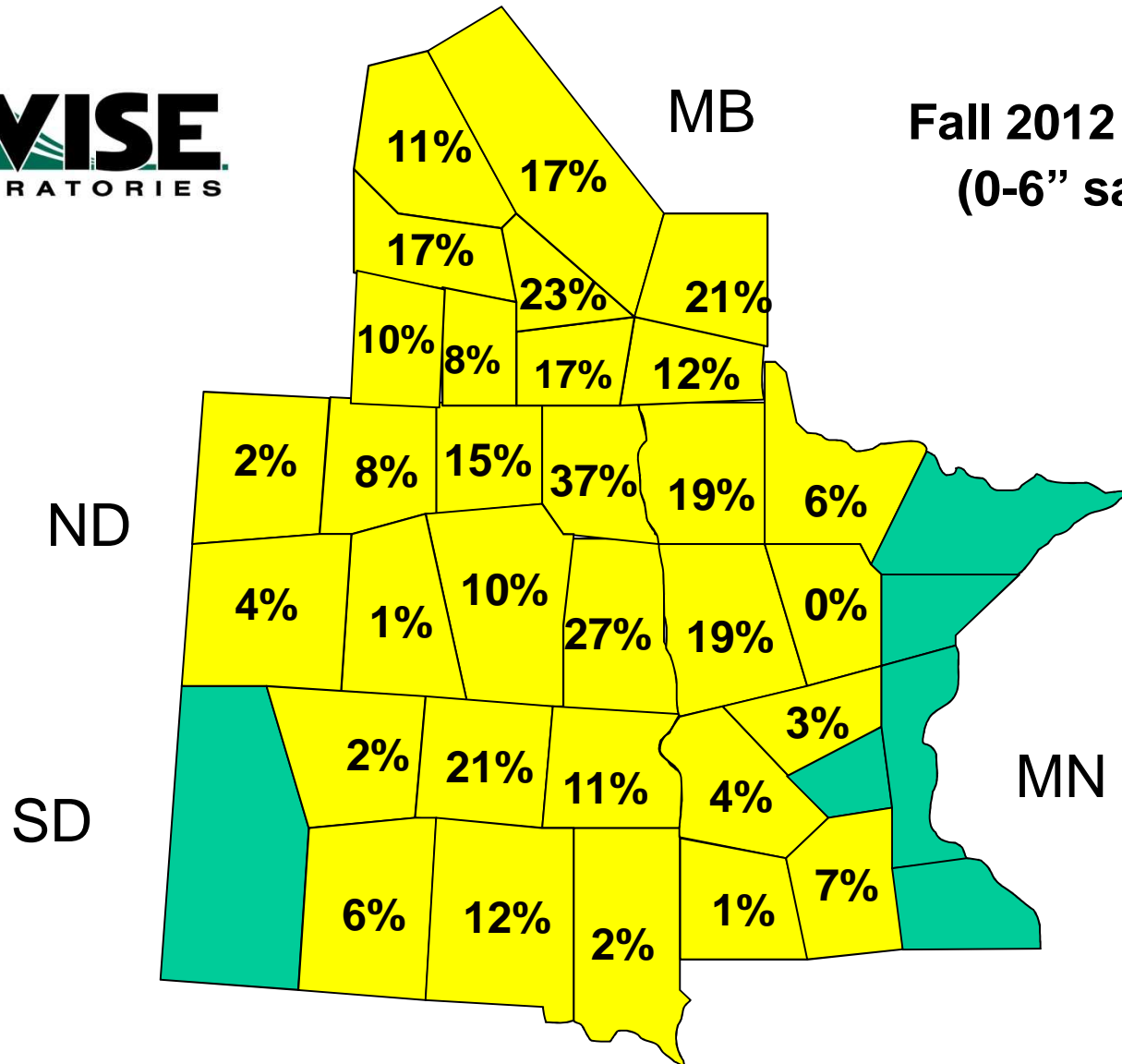
Fall 2012 samples  
(0-6" samples)



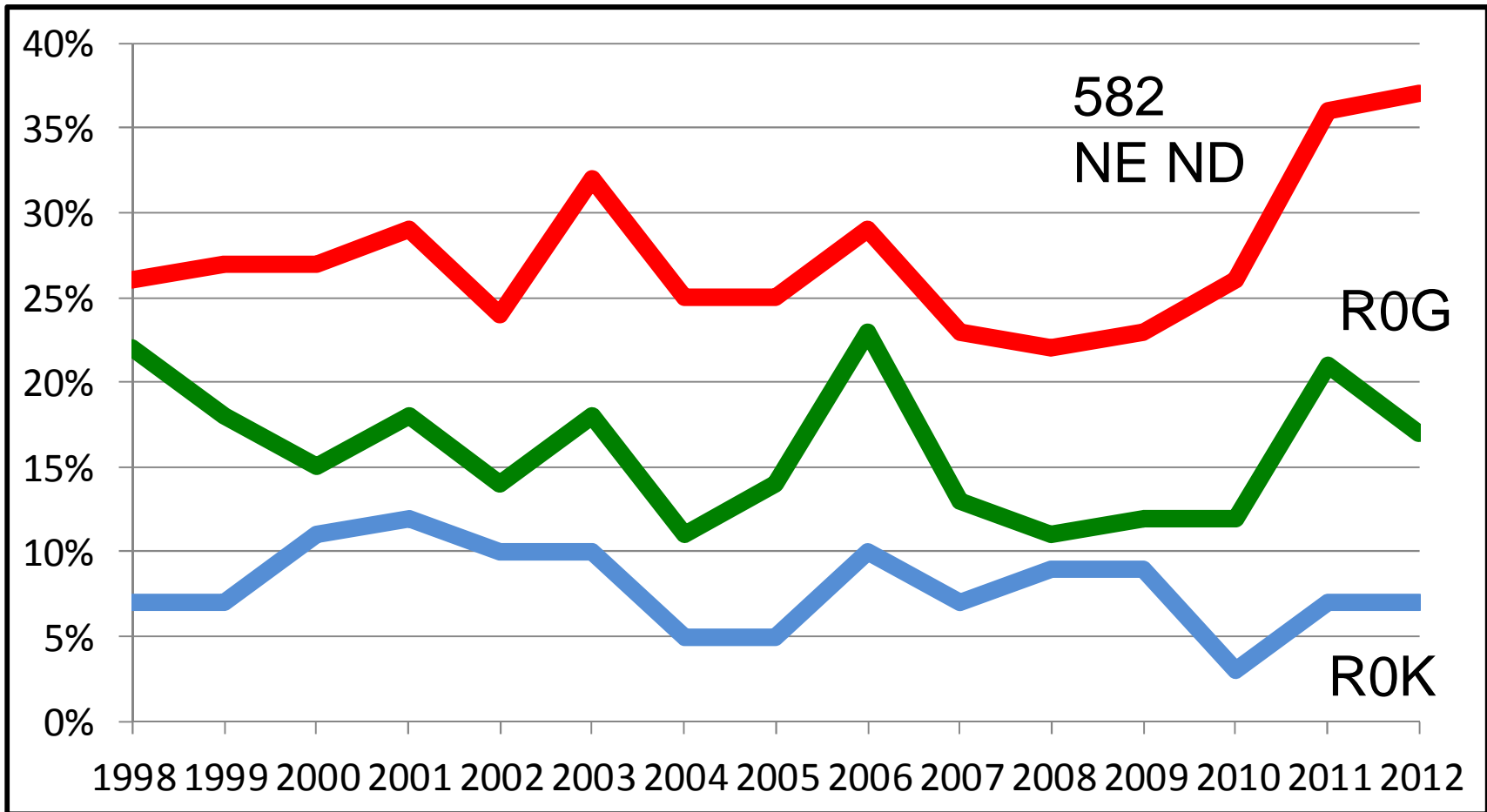
# *% Soil Samples with Salts greater than 1.0*



Fall 2012 Samples  
(0-6" samples)



# ***Manitoba - % Samples Testing with Salts greater than 1.0***



1:1 salt method – expressed as mmhos/cm



# The Salt Problem may be Worse than this?

- Composite samples
  - Avoid areas that don't represent most of the field
    - Saline areas
    - Sandy ridges
- Many salty fields don't get tested
- Zone sampling
  - The salty zones often do not get tested or fertilized