



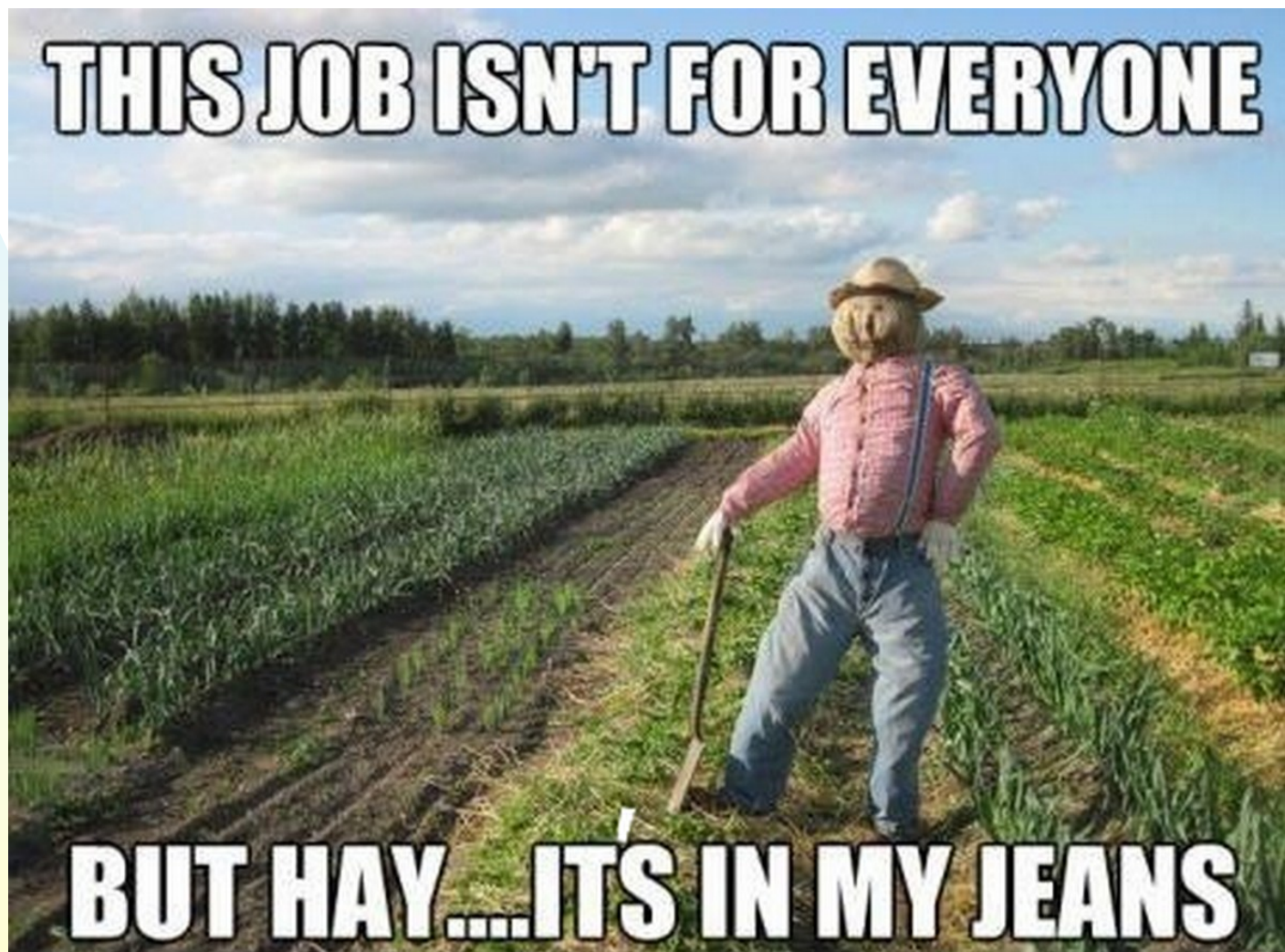
# On Farm Benefits of NCD&CS Agronomic Division & Field Services



Steve Troxler, Commissioner of Agriculture



# About Me.....







# Agronomic Division

Colleen Hudak-Wise, Ph.D., Director

## ❑ Soil Testing Lab

- David Hardy, Ph.D., Section Chief
- Jagathi Kamalakanthan, Agronomist

## ❑ Plant, Waste, Solution & Media Analysis Lab

- Kristin Hicks, Ph.D., Section Chief
- Hunter Landis, Agronomist

## ❑ Nematode Assay Lab

- Weimin Ye, Ph.D., Section Chief

## ❑ Field Services

- Michelle McGinnis, Ph.D., Section Chief
- 13 regional agronomists





# Mandate

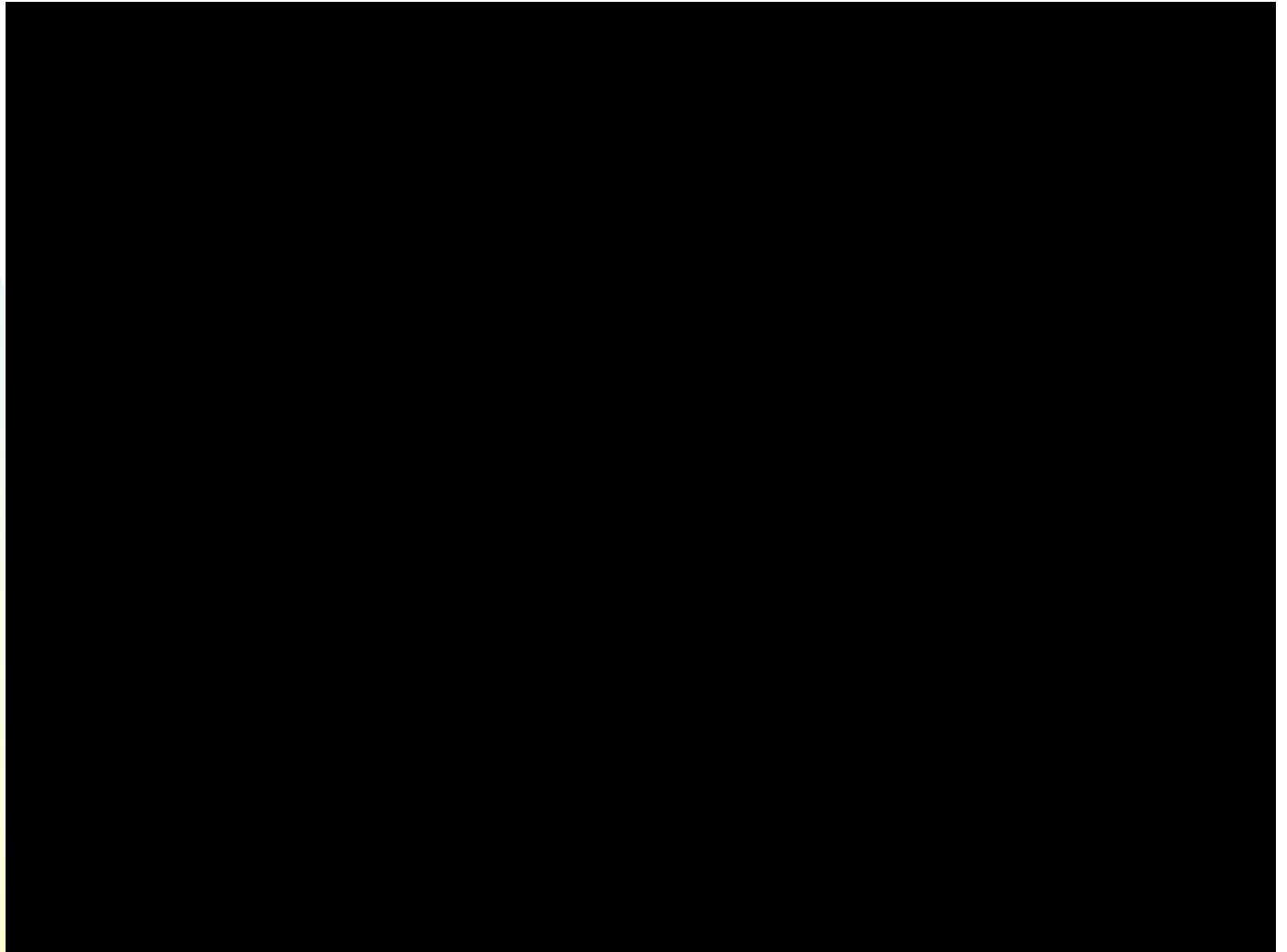
To provide N.C. residents with site-specific diagnostic and advisory services that

- increase agricultural productivity
- promote responsible land management
- protect environmental quality

— N.C.G.S. 106.19, 106.22



# Something to think about....





# Soil Testing

~306,000 soil samples in FY15



- Provides lime & fertilizer recommendations
- Helps prevent/diagnose plant-growth problems
- Helps protect environment from excess nutrients



# Soil Testing Fees†



Standard soil test . . . . . \$4 peak season\*

Research sample . . . . . \$5

Heavy metals . . . . . \$25

† No out-of-state soil samples are accepted.

\* Peak season is December through March. The program is also subsidized by fertilizer inspection fee and lime tonnage tax.





November 27, 2013





# Soil Test Recommendations



Dr. David Hardy, Section Chief

An agronomist reviews and interprets data, then enters recommendations for problem samples.

Interpretations for routine samples are computer generated.



# Plant Tissue Analysis

*In-state samples . . . . . \$5*

*Out-of-state samples . . . \$25*

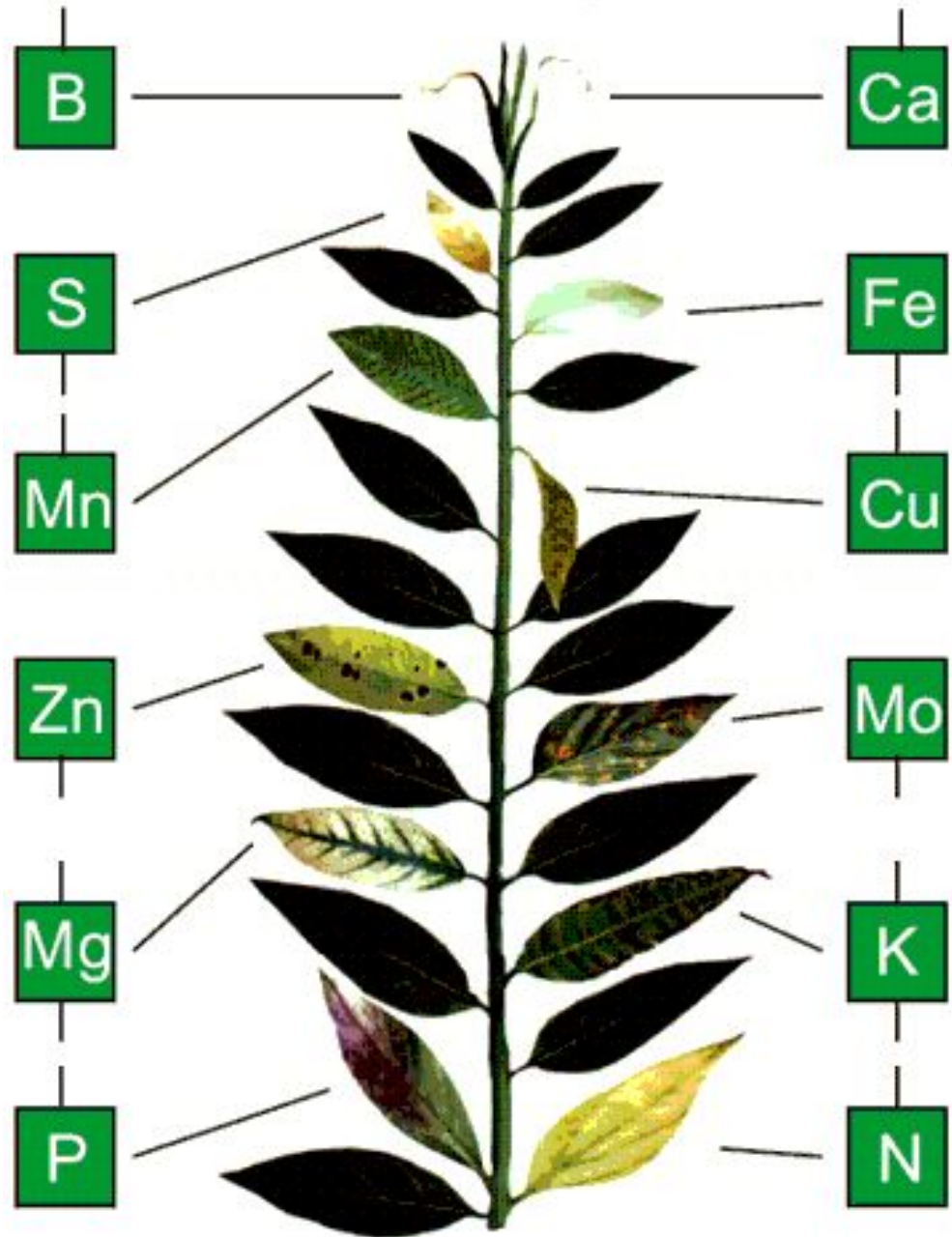
~11,000 tissue samples in FY15



- Measures nutrient levels within plants
- Identifies nutrient deficiencies and toxicities



ON TERMINAL BUDS : - Ca & B  
ON YOUNG LEAVES : - Cu, S, Fe & Mn  
ON OLD LEAVES : - N, P, K, Mg, Zn & Mo







# Nematode Assay

*In-state samples . . . . . \$3*

*Research samples . . . \$10*

*Out-of-state samples . . . \$10*

~40,000 nematode assays in FY15



- Identifies plant-parasitic nematodes
- Estimates nematode population levels
- Recommends management practices



# Waste Analysis

*In-state samples . . . . . \$5*

*Out-of-state samples . . . \$25*

~15,000 waste samples in FY15



- Measures nutrient content of animal waste
- Measures nutrient content of composted materials
- Measures lime equivalency



# Solution Analysis

*In-state samples . . . . . \$5*

*Out-of-state samples . . . \$25*

~3,000 solution samples in FY15



—Measures suitability of water for agricultural purposes





# Soilless Media Analysis

*In-state samples . . . . . \$5*

*Out-of-state samples . . . \$25*

~700 soilless media samples in FY15



— Measures nutrient levels, electrical conductivity & pH of soilless plant growth media



# Field Services

- Work on-farm one-on-one with growers
- Use lab services to prevent and identify problems
- Offer science and research based recommendations







# Providing the Best Agronomic Services for North Carolina



To promote responsible land management  
and protect environmental quality