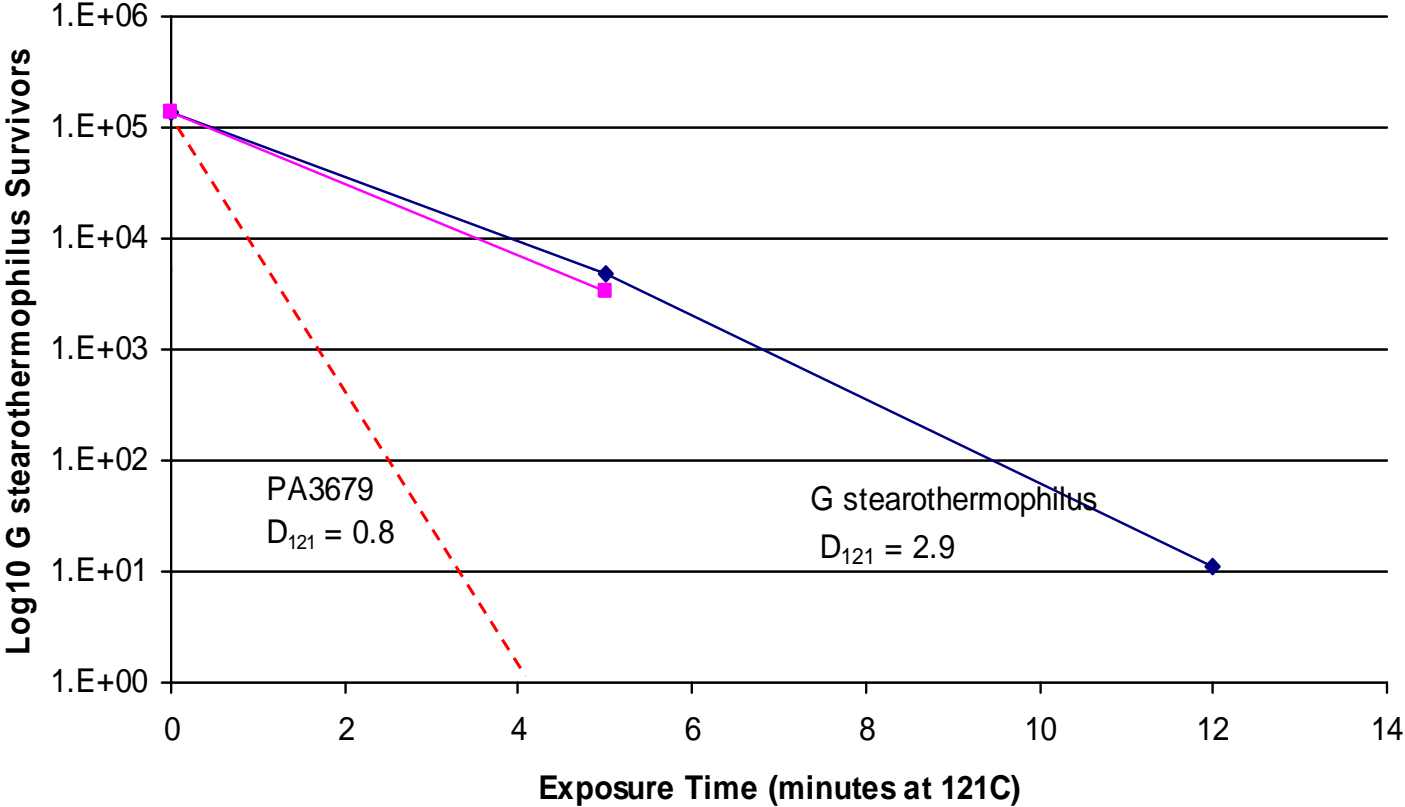


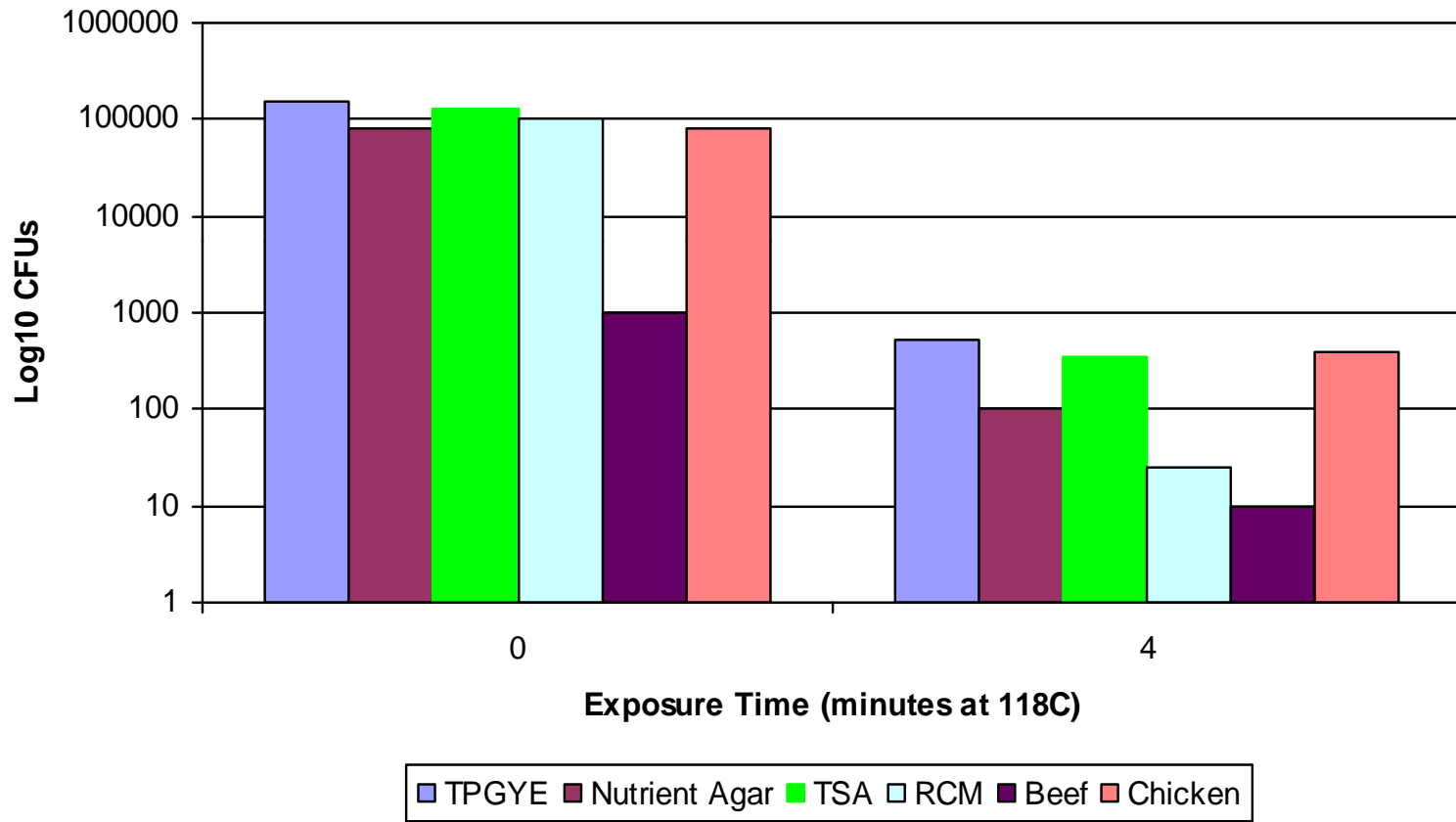
# Factors Affecting the Resistance of Bacterial Endospores in Food Systems

Joseph P Dalmasso, PhD  
President  
Apex Laboratories, Inc

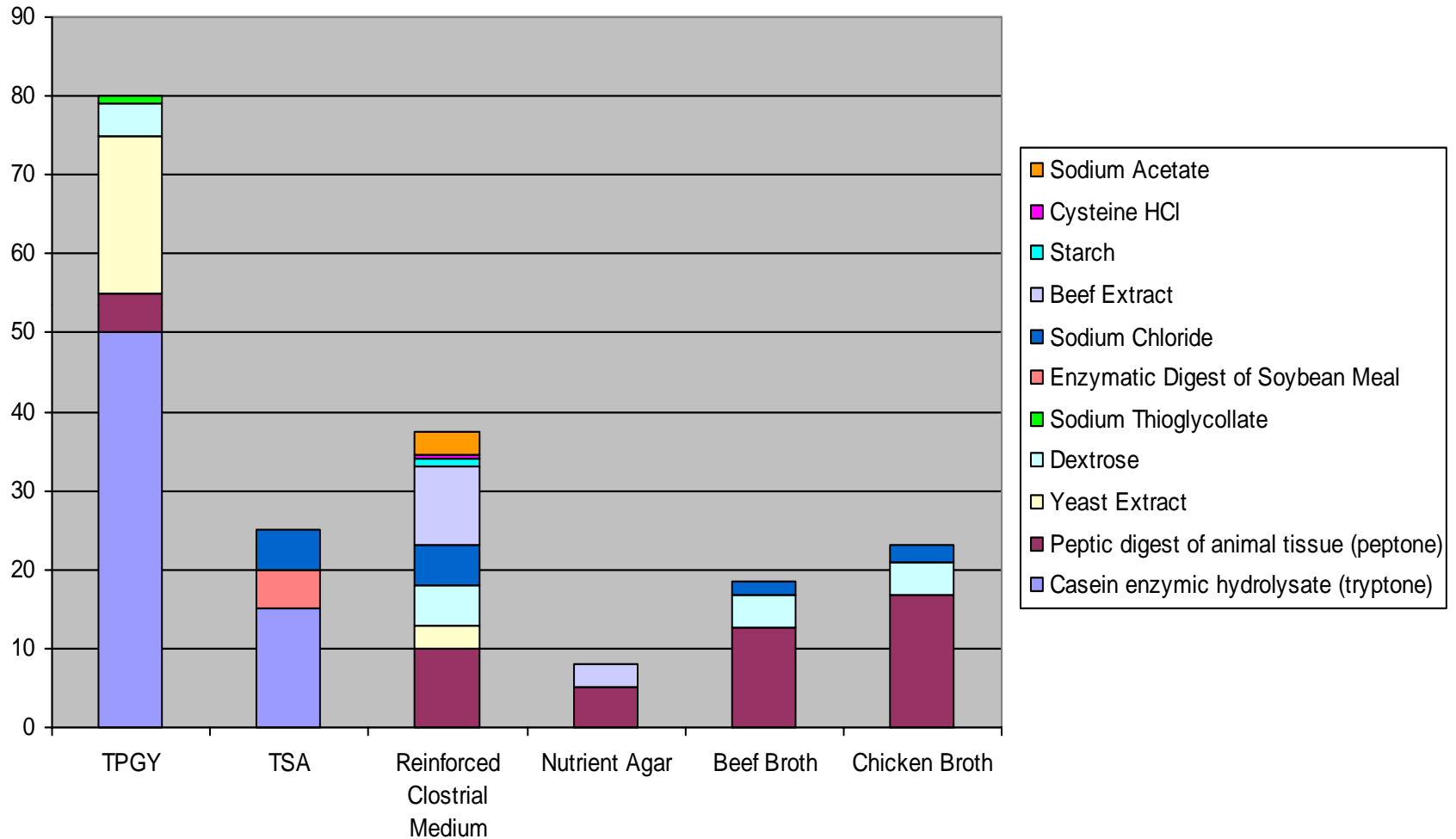
# G stearothermophilus and CI sporogenes (PA 3679) in M/15 Sorensens



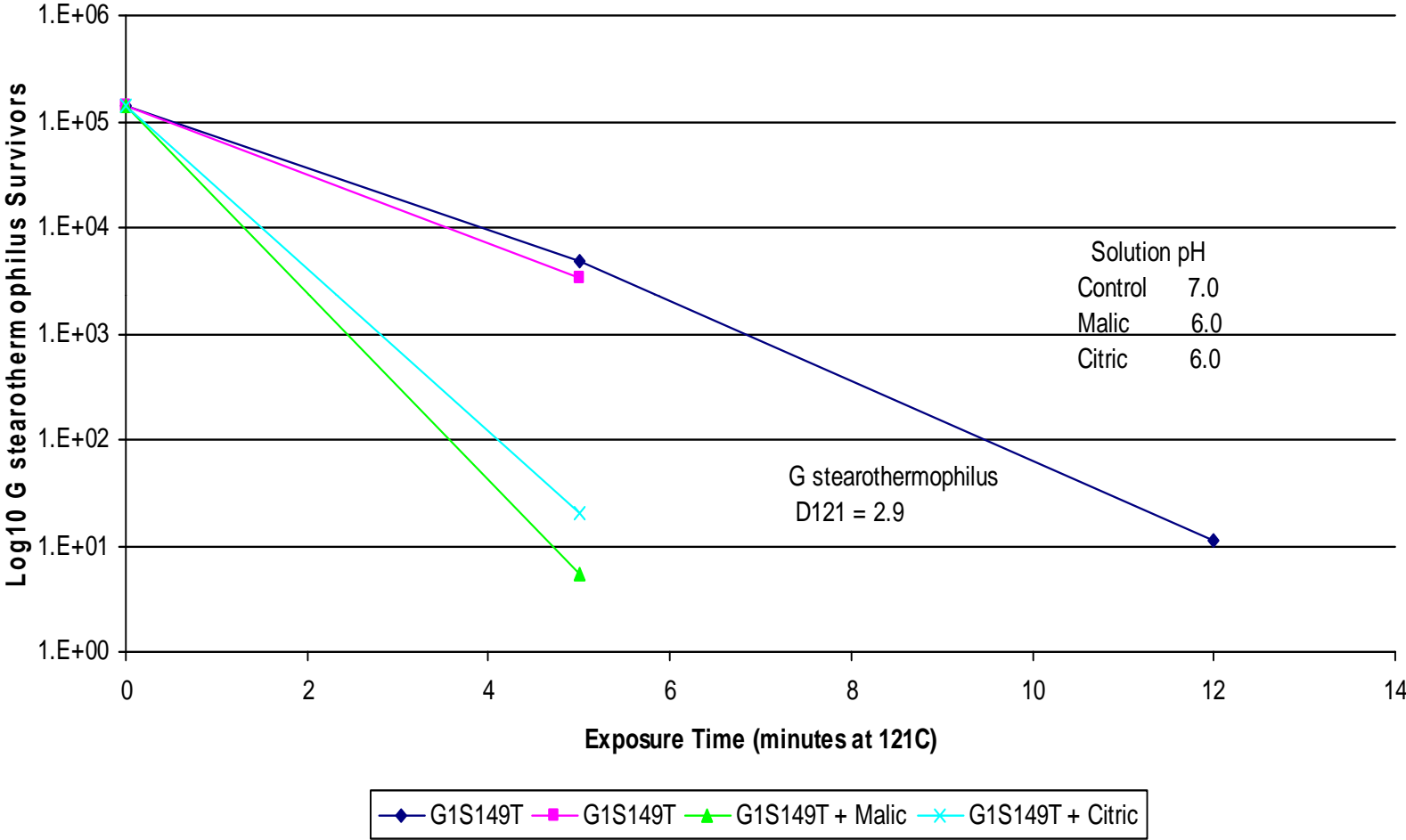
## Recovery Media Comparison for PA3679 Spores Suspended in Sorensen's M/15 Buffer



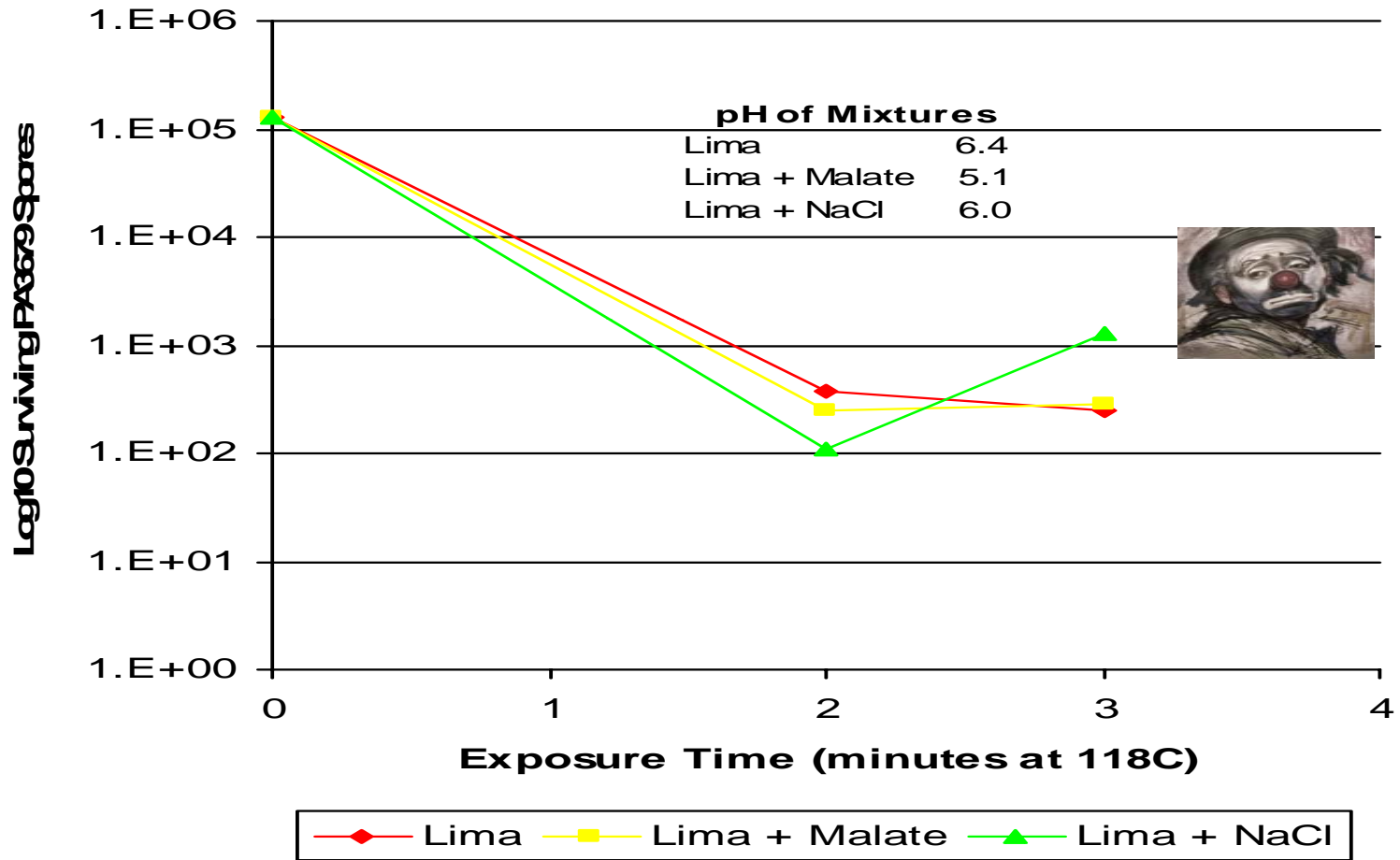
# Components in Test Media (g/L)



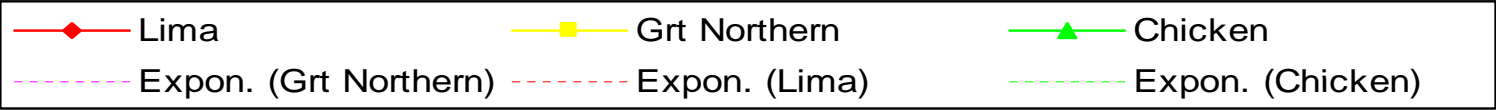
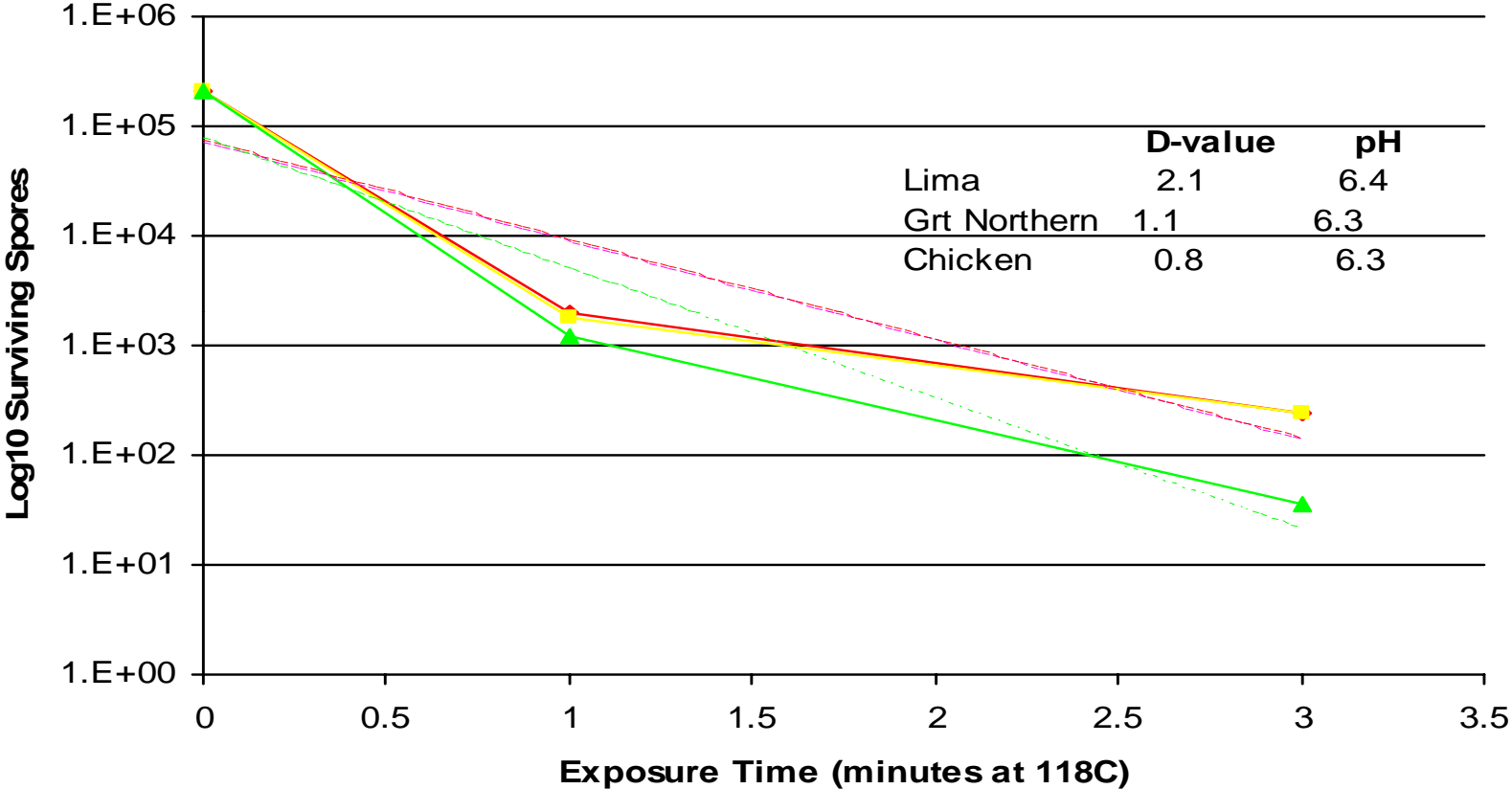
### G stearothermophilus in M/15 Sorensens with Malate and Citrate



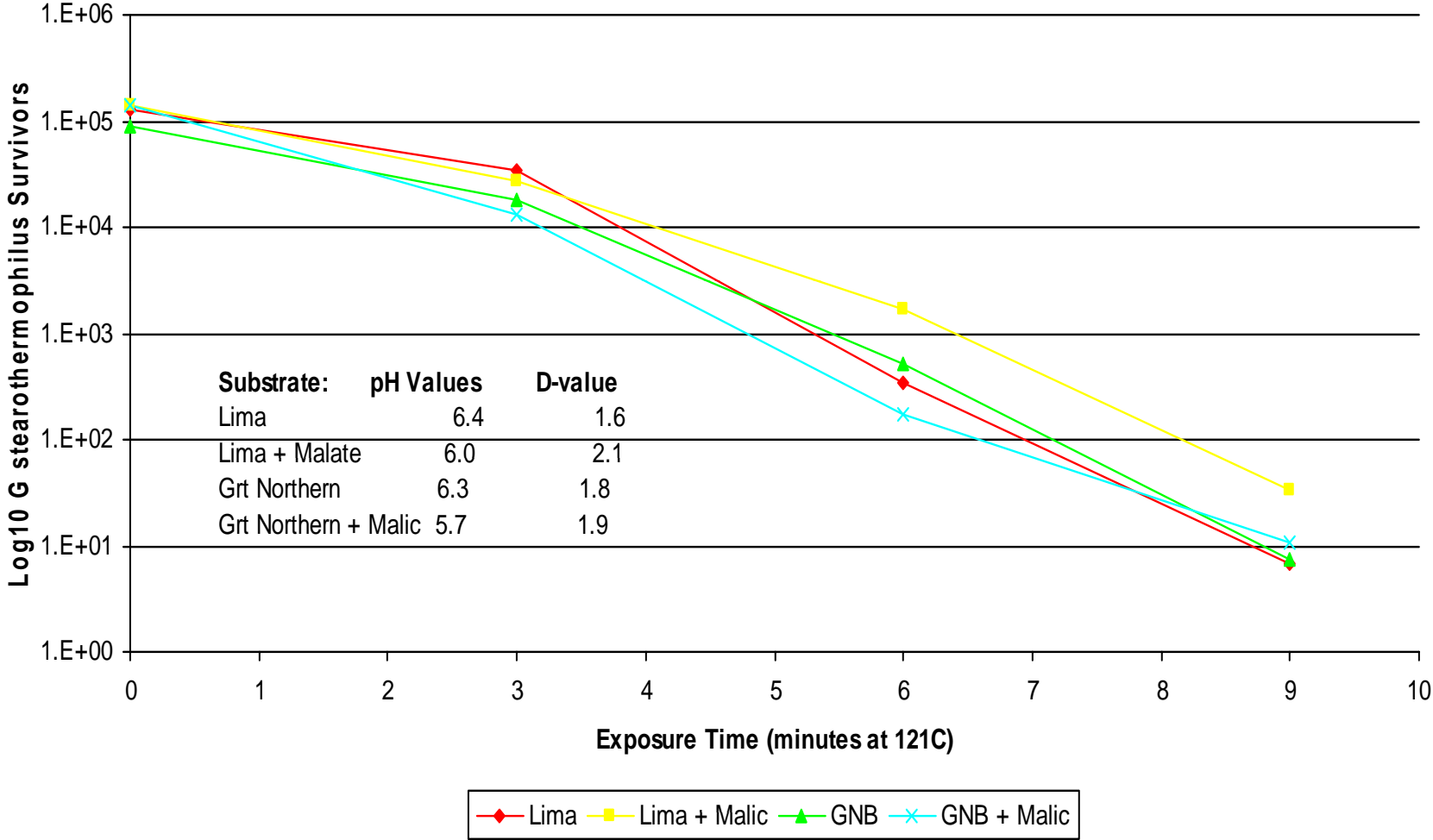
## Bracket Run: Lima + Malate or NaCl



### PA 3679 Survivor Plot

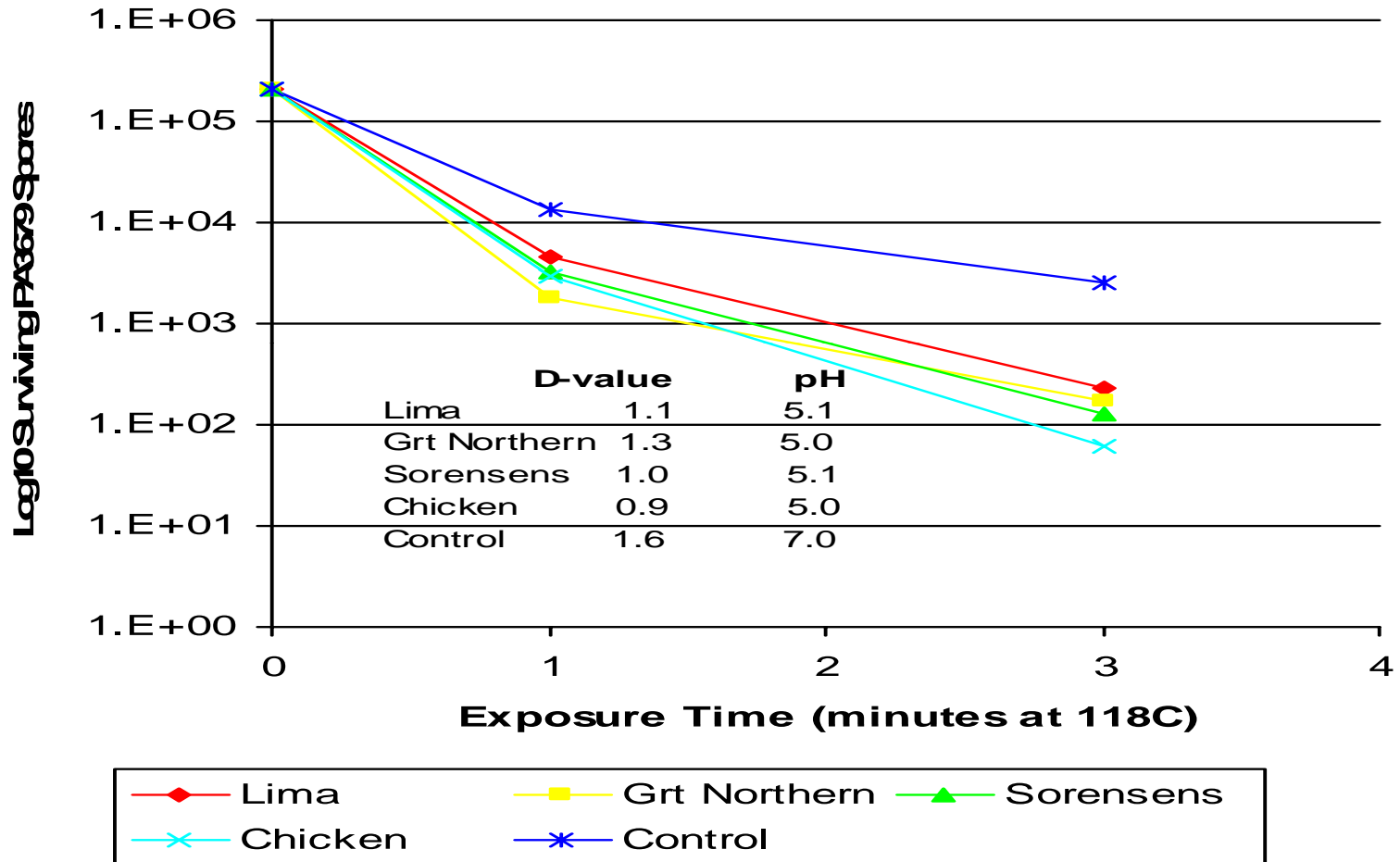


### Lima and Great Northern Substrates with Malate Addition



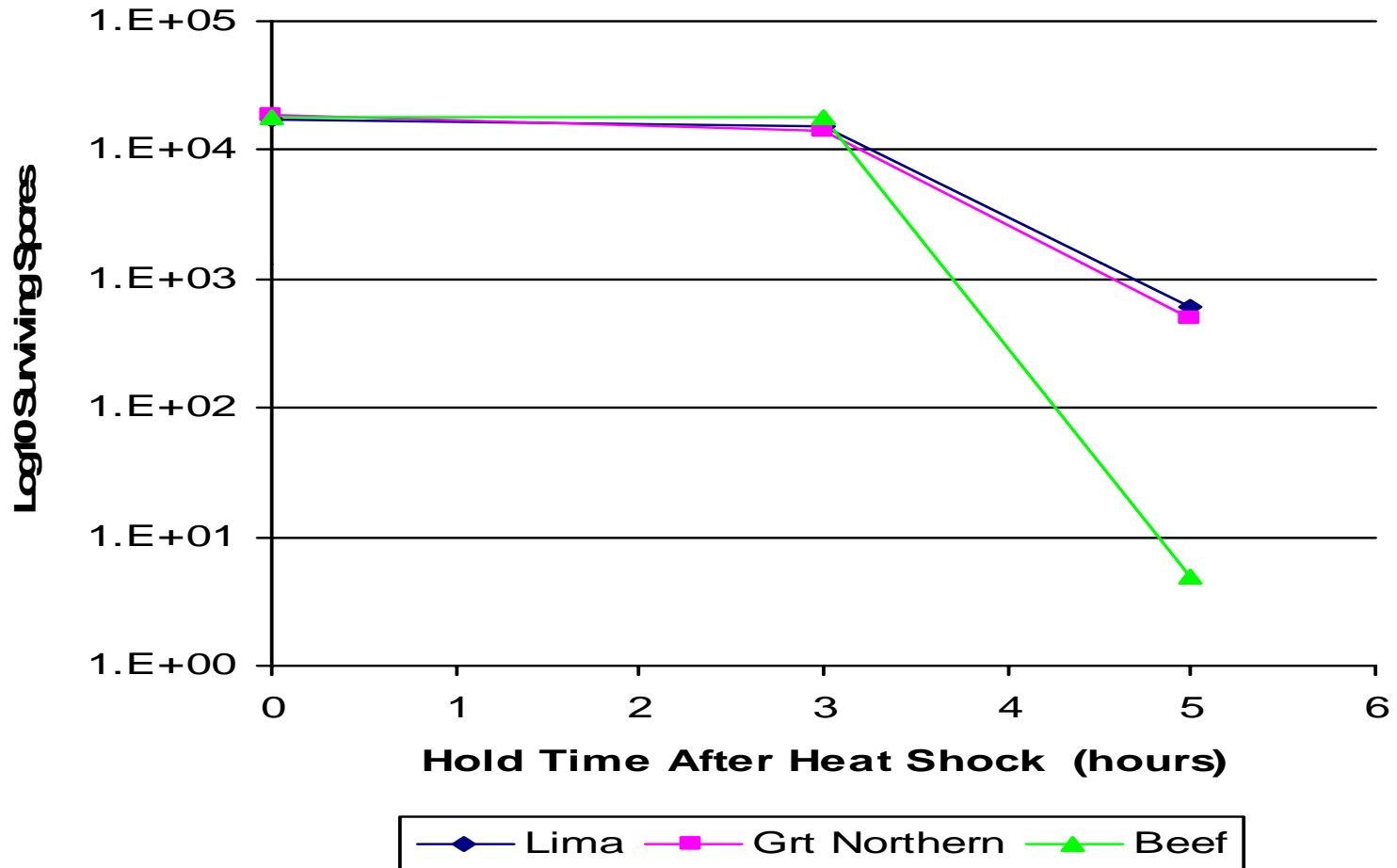


## Substrate Acidified with Malate

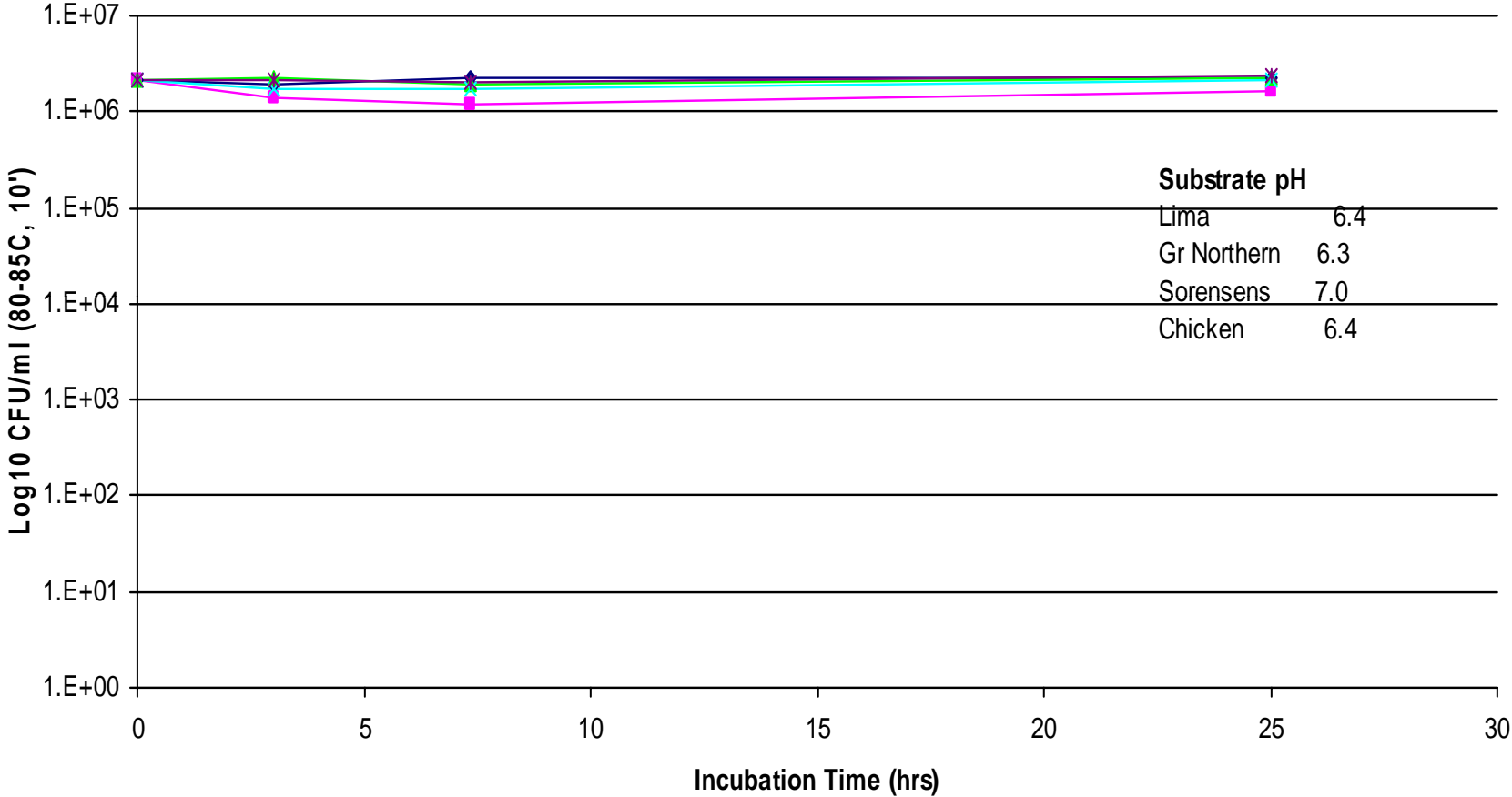




## PA3679 in Various Substrates: Heat Shock (80-85C, 10'), Then Hold

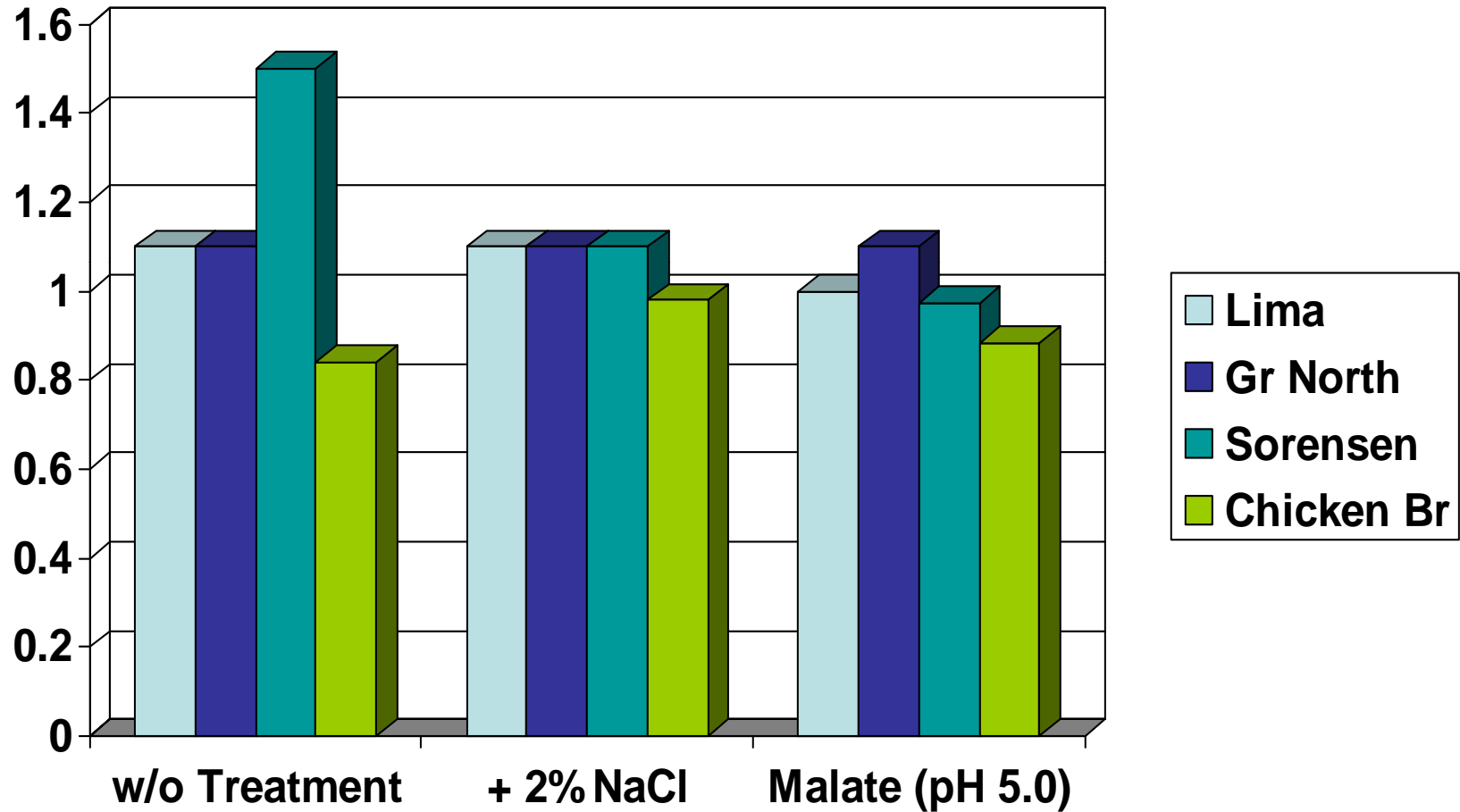


### Ambient Incubation (PA 3679)



—◆— Lima —■— Grt Northern —▲— Sorensens M/15 —×— Chicken —\*— Beef

# PA3679 D-values at 118C



# Thanks to the Staff of **Apex Laboratories**



# PLAN YOUR WORK !

