

Method Updates

Presented by:

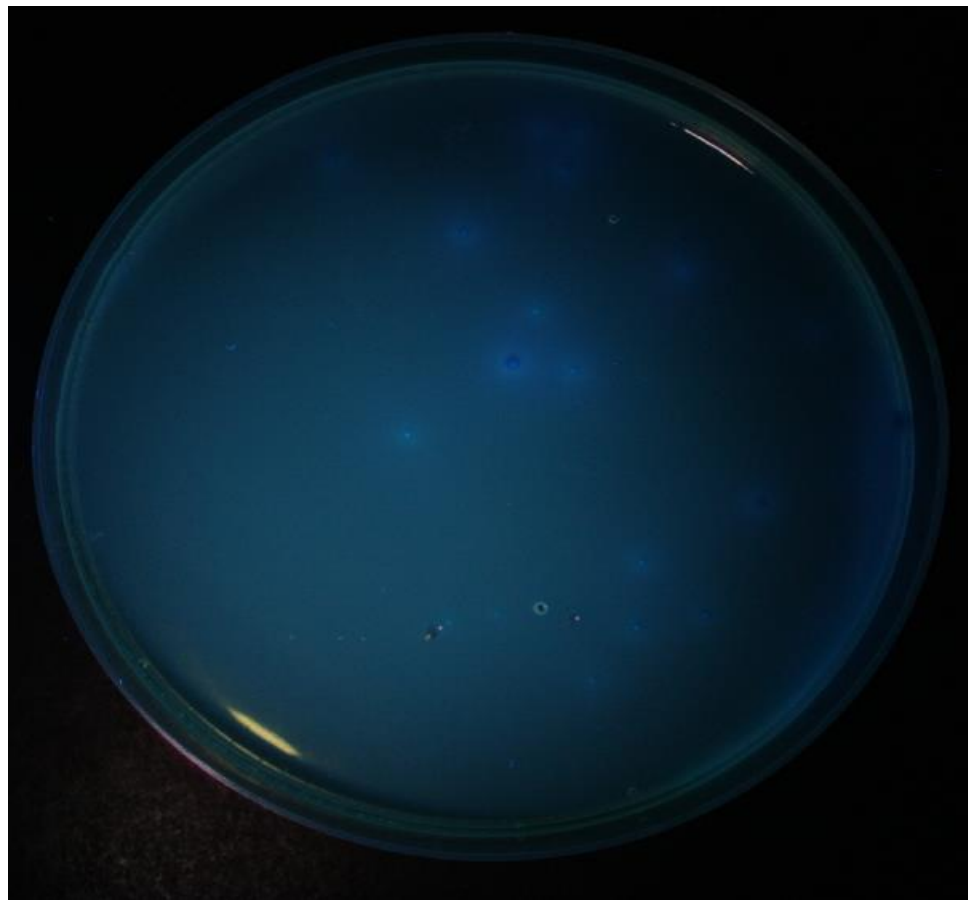
AJ Taylor and Kelly Hall

Just to recap.....

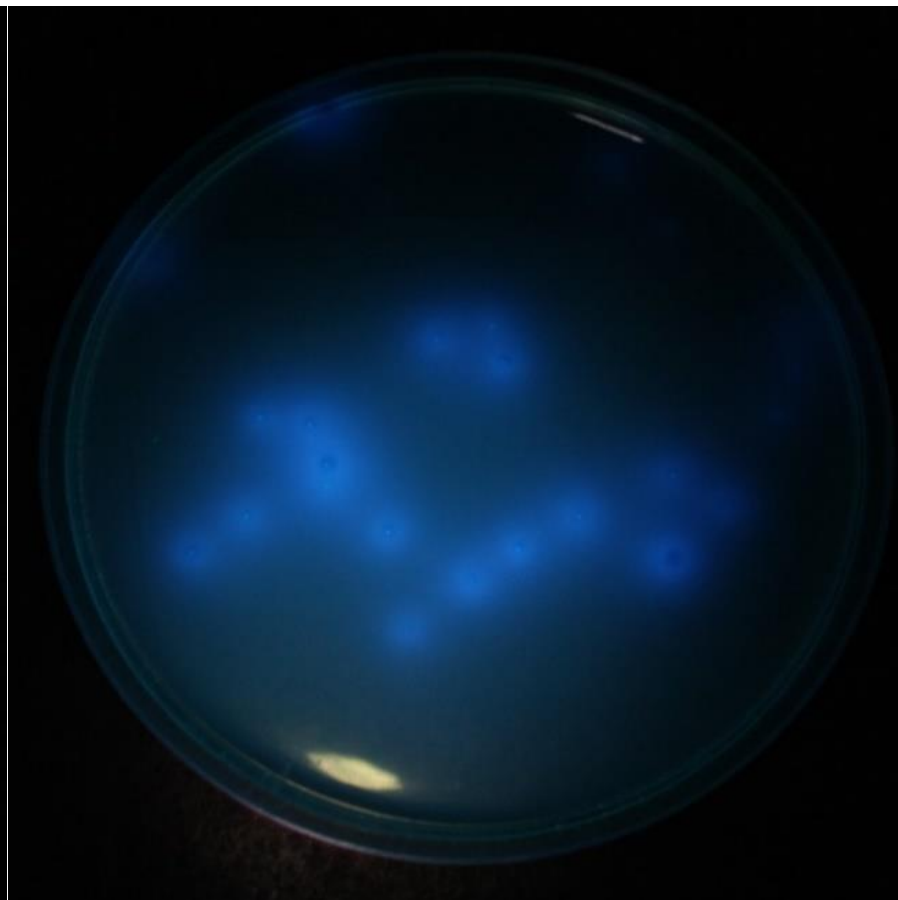
- ▶ Low %F of blue colonies led to discussion with coliscan easygel's manufacturer
- ▶ The manufacturer then increased the fluorescent enzyme in the formula
- ▶ We at CCU added additional QC by monitoring %F of the blue colonies you report!
- ▶ So is it working????



“Out with the old, in with the new”

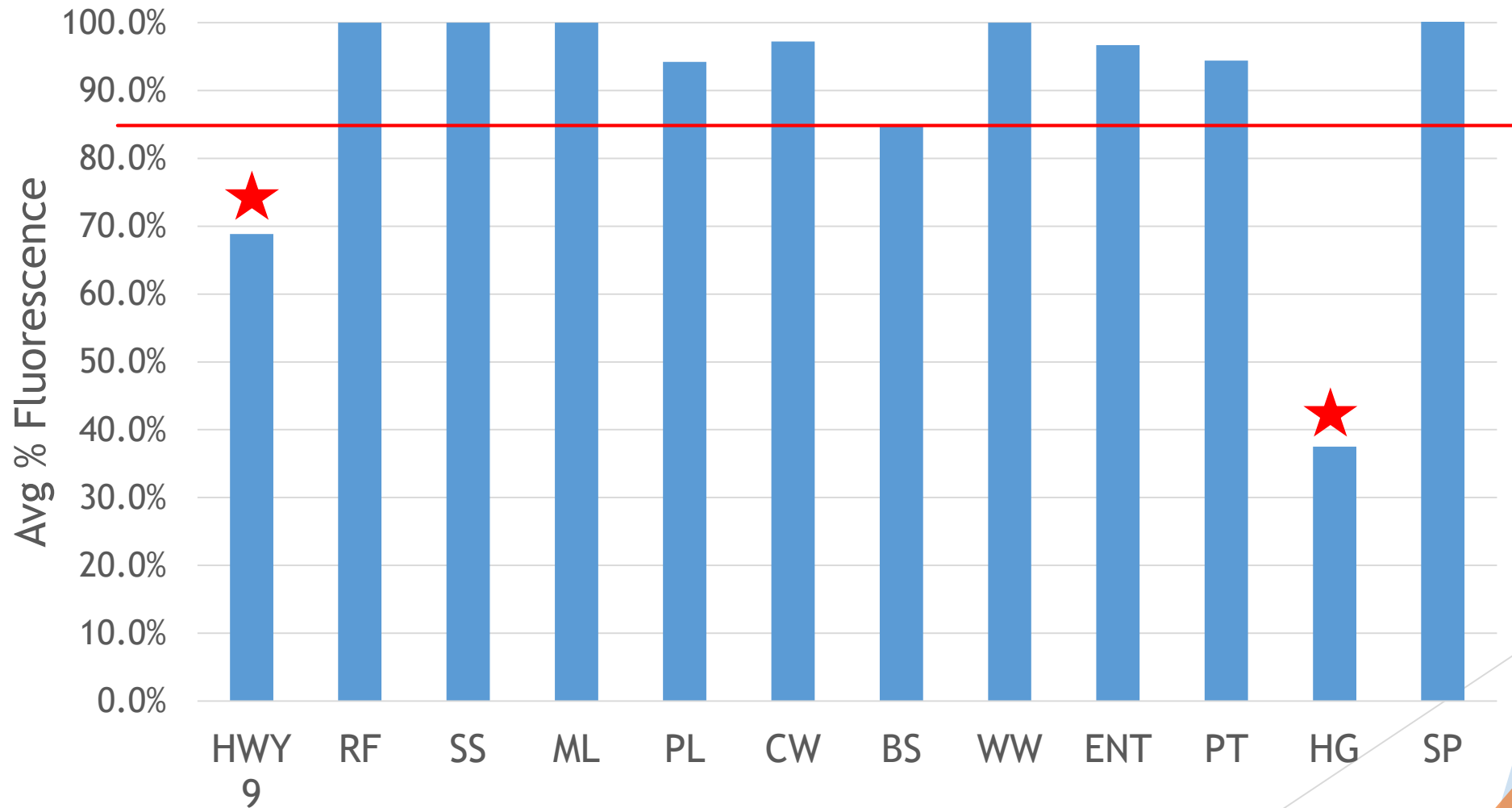


Old



New

Waccamaw River Fluorescence Data in 2017 (n = 23)



Waccamaw River Fluorescence Data 2018

(n = 36)



Upgraded Coliscan Easygel over the past year

- ▶ Only two regulatory discrepancies since upgrading to the heightened coliscan easygel
- ▶ Overall, the new formula has worked out well so far!
- ▶ Don't be surprised if you see some blue colonies that still will not fluoresce!!!

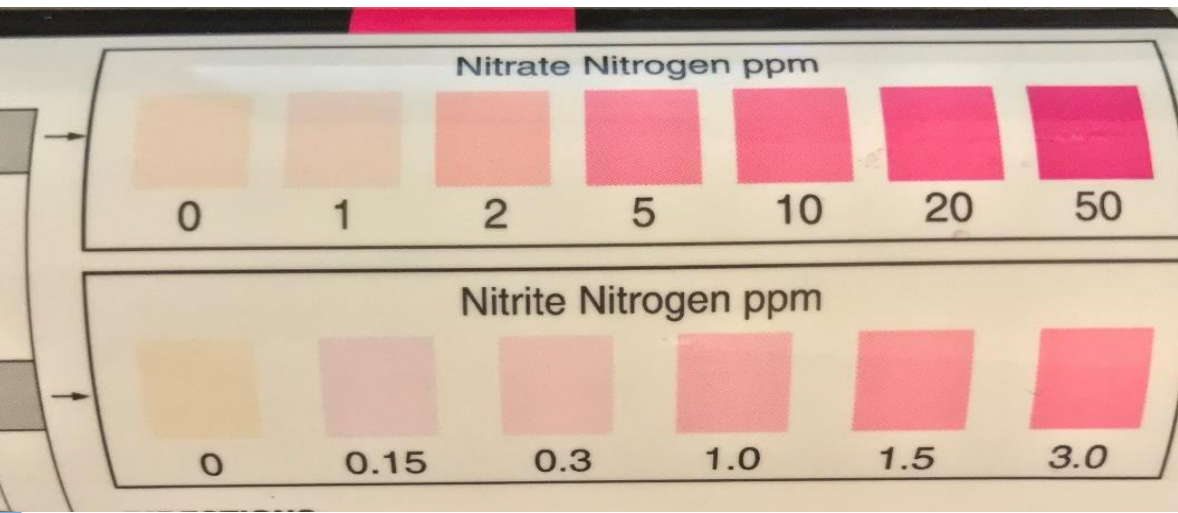


Nutrient Strip Discoloring Issue

- ▶ After much work, the Nitrate pads have not had the same discoloring issue
- ▶ If for whatever reason they start to look discolored, let us know so we can replace them as well as contact the manufacturer!
- ▶ While looking closer at the bottles, we noticed a new detail about the Nitrate measurements!



Taking a closer look!



- ▶ The Nitrate pad actually measures Nitrate+Nitrite Nitrogen present in your sample
- ▶ Not a huge deal in reporting the data because we rarely see Nitrite in our samples
- ▶ We did however make the adjustment to the data sheet

Note: The Nitrate Test actually measures the sum of both nitrate nitrogen and nitrite nitrogen present in the sample.
IMPORTANT: KEEP CAP ON TIGHT BETWEEN USES. STORE AT ROOM TEMPERATURE.

- ▶ The Nitrate measurement section is now changed to N+N
- ▶ When entering data into the website, be aware of the two possibilities:
 1. If Nitrite=0, then the N+N value will just be entered as Nitrate
 2. If Nitrite >0, then use this formula,

$$(N+N \text{ measurement}) - (\text{Nitrite measurement}) = \text{Nitrate measurement}$$

<u>Nutrient strips</u>		Time Measured: <input type="text"/>	<i>Report to VM Coordinator ASAP if the sum of Ammonia and N+N values is above 1</i>	
Ammonia:	<input type="text"/> mg N/L	<input type="text"/> <input type="text"/> <input type="text"/>		<i>Zero Check. Check here that each strip reads ZERO before you use it.</i>
Nitrite:	<input type="text"/> mg N/L (Compare color of pad closest to fingers (away from outer tip of the strip))			
N+N	<input type="text"/> mg N/L (Compare color of pad located at the outer tip of the strip)			

Sampling Reminders

- ▶ Keep recording observations! (Rainfall, flow, or other!)
 - ▶ Watch for drift in measurements
 - ▶ Keep using the percentiles to track “normal” or “unusual” measurements!
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- ▶ **Lastly, Thanks for another year of success!**

QUESTIONS
COMMENTS
CONCERNS
PROBLEMS
COMPLAINTS

