

Exercise #18. Citrate Utilization Procedure p. 48

<p>Day 1 Wed 7/15/09</p>	<p>Procedure:</p> <ul style="list-style-type: none"> • work in groups of 3 or 4 • inoculate Simmons citrate agar slants (streak surface of slant) • slants: <ul style="list-style-type: none"> ○ 2 organisms x 2 slants = 4 slants ○ plus unknowns (3 or 4 x 2 slants = 6 or 8 slants) ○ Number of tubes TOTAL: 10 or 12 • INCUBATE: 37°C, 48 hours 	<p>Organisms:</p> <p>Controls:</p> <ol style="list-style-type: none"> 1. <i>E. coli</i> 2. <i>E. aerogenes</i> <p>Your Unknowns:</p> <ol style="list-style-type: none"> 3. Unknowns
<p>Day 2 Mon 7/20/09</p>	<p>Results:</p> <ul style="list-style-type: none"> • observe Simmons Citrates slants for growth and color • observe uninoculated control to compare color changes • positive result: <ul style="list-style-type: none"> ○ organism that can transport citrate will grow in the medium [Enterobacter] ○ if able to grow [luxuriantly] medium will change color ○ green [neutral pH] to deep blue [alkaline pH] • record results on pp. 31-2 & 49 <ul style="list-style-type: none"> ○ for unknowns and known's • answer questions • refer to dichotomous key 	

1. When Simmons Citrate agar is inoculated with *Enterobacter*, the medium turns royal blue. This is a positive result for the citrate test

2. When Simmons Citrate agar is inoculated with *Escherichia coli*, the medium remains green. This is a negative result for the citrate test

