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Section: Technical Manual	Subject Title: Urea Slant	
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UREA SLANT

Principle

To determine the ability of an organism to split urea by the action of the enzyme urease forming two molecules of ammonia with resulting alkalinity.

Materials

Urea Slant
Bacteriology loop

Procedure

1. From one isolated colony, heavily inoculate the urea slant.
2. Incubate O₂, 35⁰C.
3. Read at 3 hours and again at 18-24 hours.

Interpretation

Positive: Intense pink-red colour.
 Rapidly positive: 1 to 6 hours (*Proteus* spp.)
 Delayed positive: ≥ 18 hours

Negative: No colour change

Precautions

Urea test media rely on the demonstration of alkalinity, thus are not specific for urease. The utilization of peptones or other proteins may cause an increase in pH.

Quality Control

Controls should be set up weekly.

<i>P. mirabilis</i> (ATCC 12453):	Positive - 4 hours
<i>K. pneumoniae</i> (ATCC 13883):	Weak positive - 18 hours
<i>E. coli</i> (ATCC 25922):	Negative

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References

1. MacFaddin JF, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore MD, 1980, p298-308.