



CRC

for

Premium

Quality

Wool

# Incubated Colour Test

Produced for the CRC for Premium Quality Wool undergraduate program by;  
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- **expression of discolouration depends on warm temperatures and high humidity**
  - **chemical reactivity:**
    - temperature dependent e.g. Maillard reaction
  - **microbial activity:**
    - moisture and temperature dependent
  - **rate of colour absorption by fibre:**
    - faster in wet conditions than in dry

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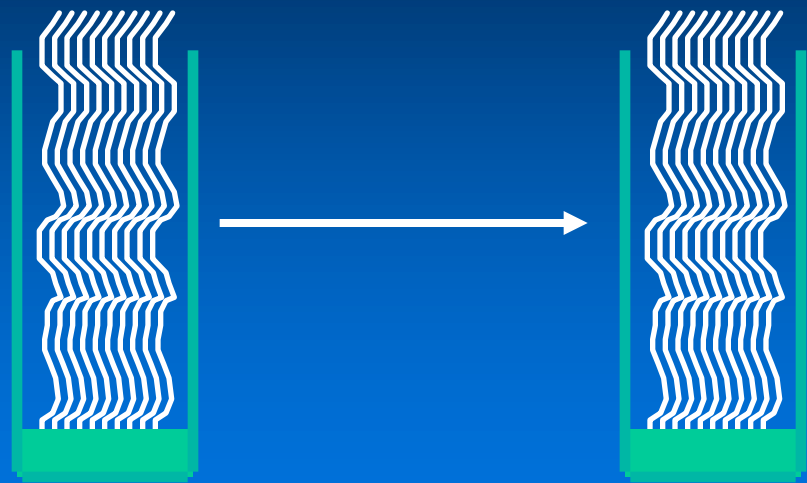
Wool



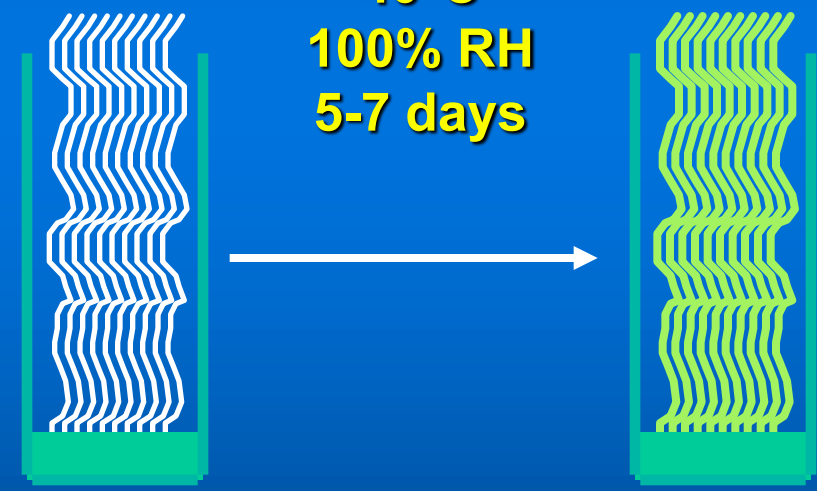
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# Incubated Colour

## Resistant to discolouration



40°C  
100% RH  
5-7 days



## Susceptible to discolouration



# Phenotypic correlations

Pre-incubation

Post-incubation  
Absorbance#

suint content (%)

0.85

wax/suint ratio

- 0.72

potassium content  
in suint (mg/g)

0.95

fresh suint pH

0.74

yield (%)

- 0.20

fibre diameter ( $\mu\text{m}$ )

0.69

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