

Lecture-3

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graph TD; A[Lecture-3] --> B[Contents]; A --> C[Pretreatments for Dyeing]; A --> D[Flow chart of Textile Wet Processing for Woven Fabric]; A --> E[Objectives of Each Stage of Wet Processing];
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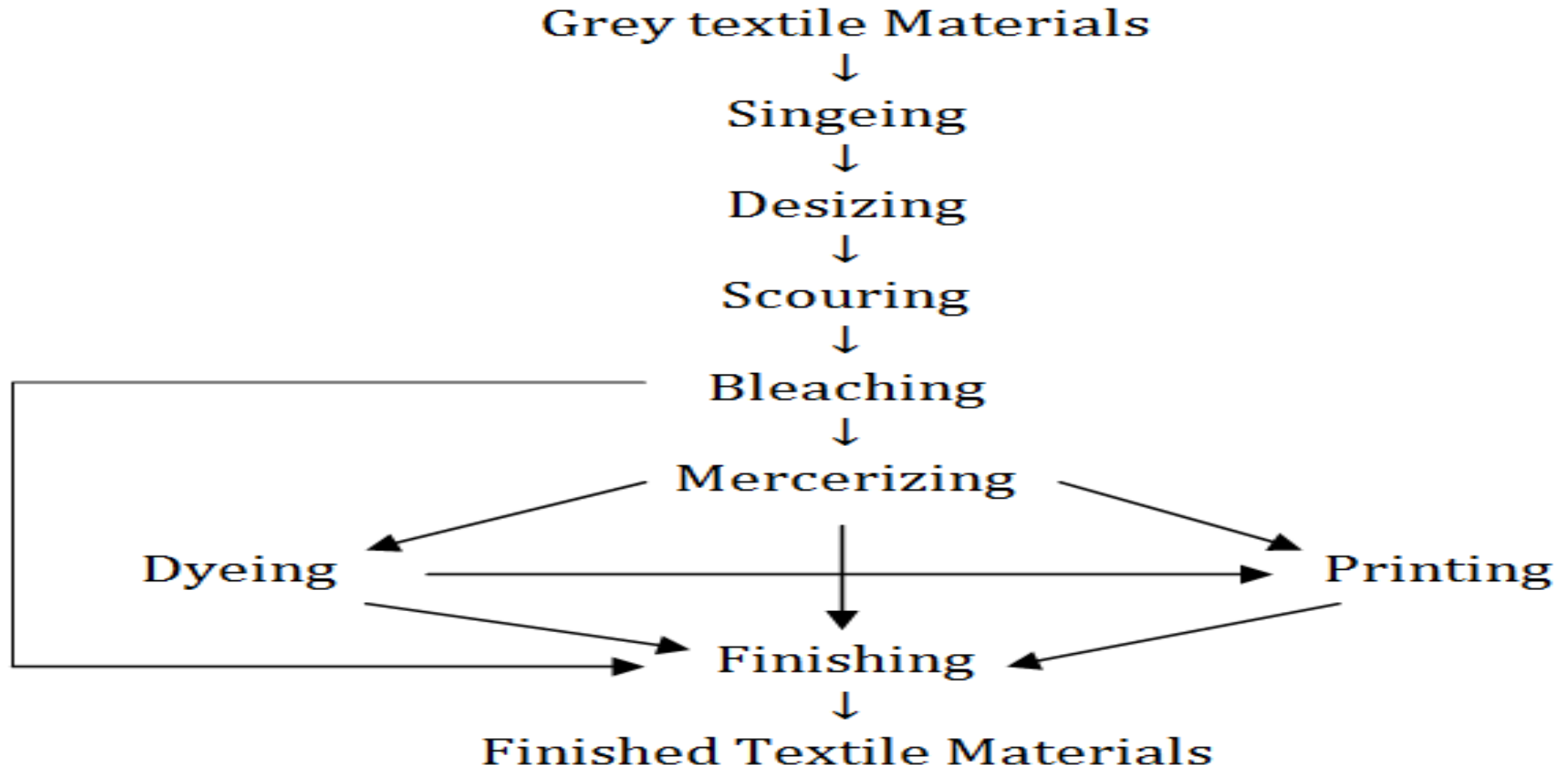
Contents

Pretreatments for
Dyeing

Flow chart of Textile
Wet Processing for
Woven Fabric

Objectives of Each
Stage of Wet
Processing

Basic flow chart of textile wet processing for Woven Fabric:



Stages of Textile Wet Processing for Woven Fabric in brief:

Singeing:

To remove projecting or protruding fiber by burning process

Projecting fiber having length min. 3mm=Hairy fiber

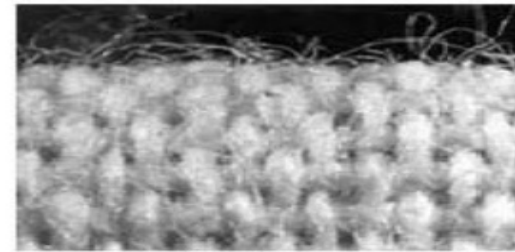
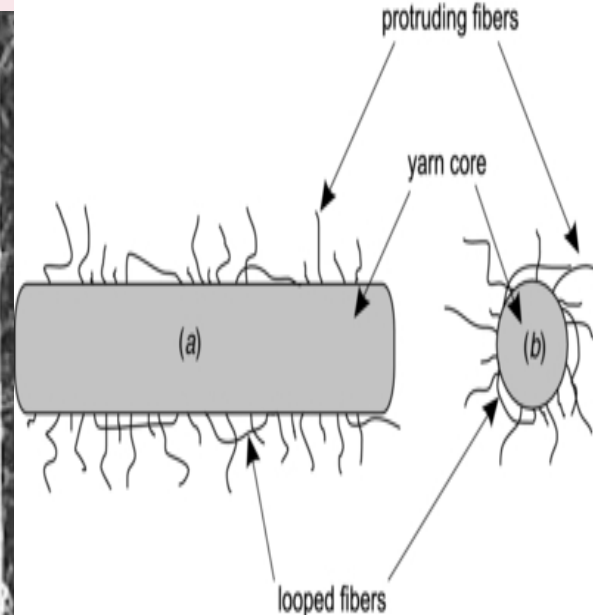
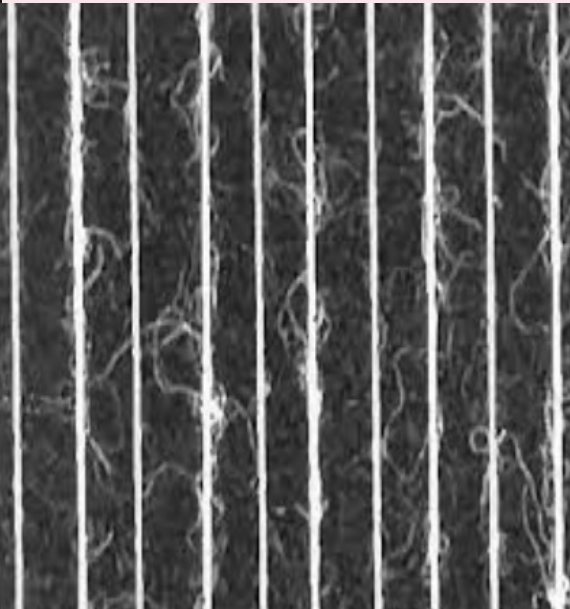


Fig. 1a. Fabric before singeing

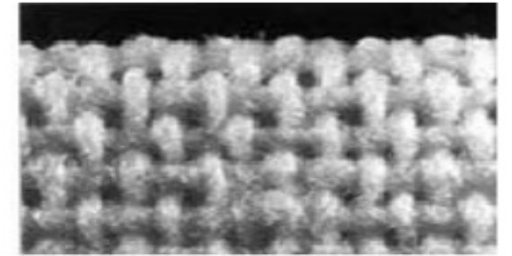


Fig. 1b. Fabric after singeing

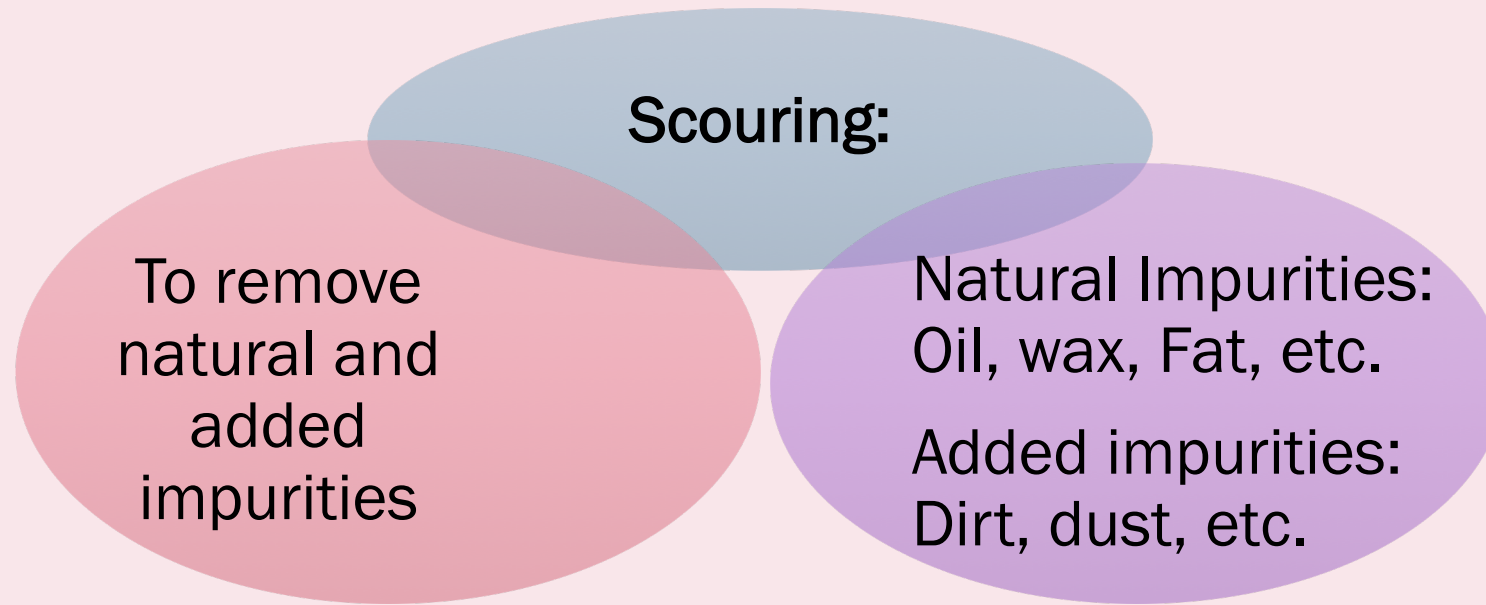


Singeing is a process of burning protruding fibres from a textile structure.

Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):



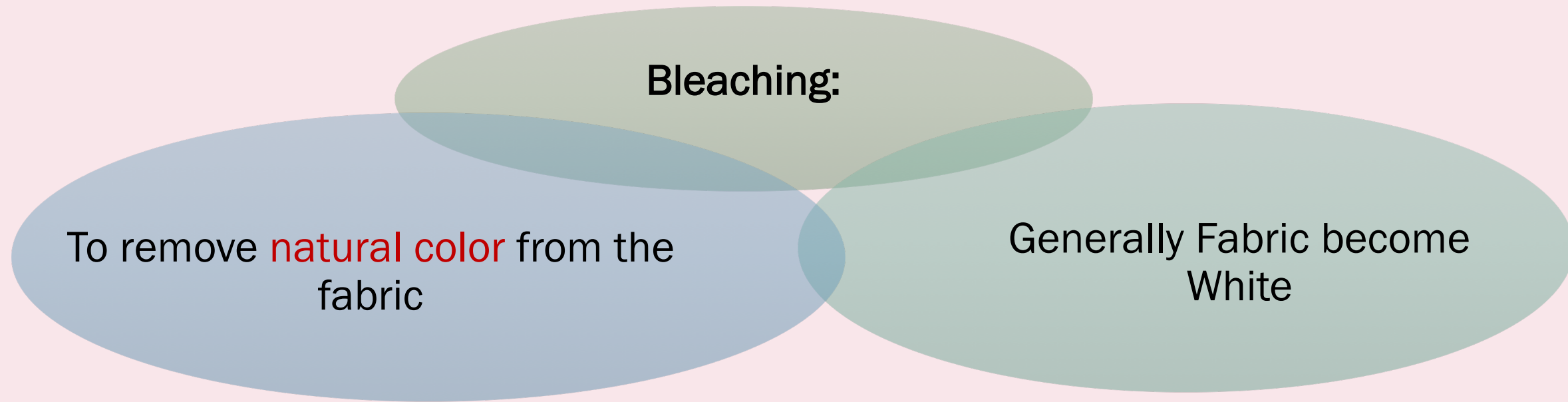
Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):



Substance	Content
Cellulose	88 - 96 %
Pectin substances	0.7 - 1.2 %
Wax	0.4 - 1.0 %
Proteins	1.1 - 1.9 %
Ash	0.7 - 1.6 %
Other organic components	0.5 - 1.0 %
Source: [186, Ullmann's, 2000]	



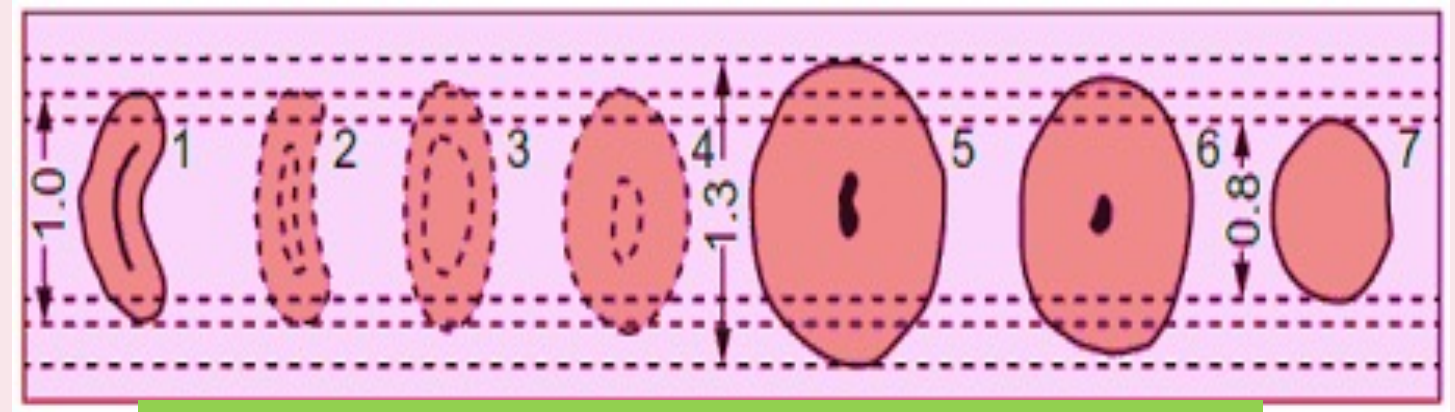
Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):



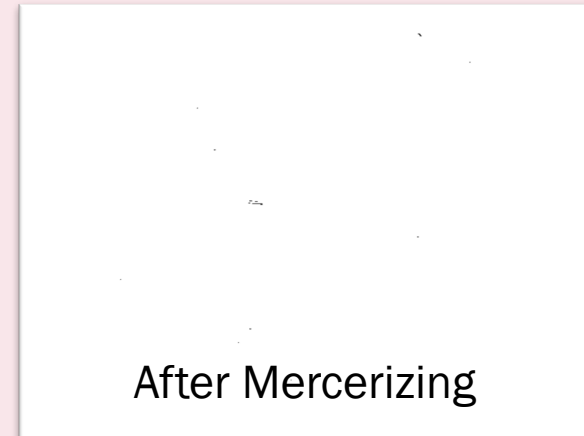
Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):

Mercerizing:

To increase Strength,
Absorbency & lusture
of the fabric.



Changes of Cotton Structure Due to Mercerization



Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):

Dyeing:

Generally to produce continuous color to the fabric



Dyed Fabric

Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):

Printing:

To produce particular impression on the fabric



Printed Fabric

Stages of Textile Wet Processing for Woven Fabric in Brief (Continued):

Finishing:

To add extra features to the fabric

Example: Softening, Ironing, Fire Proofing, etc.



Before & After Finishing (Ironing)

