

Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Sampling
5	Apparatus
6	Preparation for microscopic examination
6.1	Cross-section or longitudinal-section slides
6.2	Powder slides
6.3	Mounting and swelling agents
7	Observation of components
8	Test report

Annex A (informative) Preparation methods for microscopy

A.1	Moisturizing
A.2	Fixation
A.3	Maceration
A.3.1	General
A.3.2	Potassium hydroxide method
A.3.3	Chromic-nitric acid method
A.3.4	Potassium chlorate method
A.4	Sectioning
A.4.1	Thin section (free hand section)
A.4.2	Paraffin embedding section
A.4.2.1	Dehydration
A.4.2.2	Embedding section
A.4.3	Frozen section
A.5	Staining
A.6	Histochemical detection
A.6.1	Cell walls
A.6.1.1	Lignified cell wall
A.6.1.2	Suberized or cuticular cell wall
A.6.1.3	Cellulose cell wall
A.6.1.4	Siliceous cell wall
A.6.2	Cell contents
A.6.2.1	Starch
A.6.2.2	Aleurone
A.6.2.3	Fatty oil, volatile oil, or resin
A.6.2.4	Inulin
A.6.2.5	Mucilage
A.6.2.6	Calcium oxalate crystals
A.6.2.7	Calcium carbonate (stalactite)
A.6.2.8	Silica
A.6.3	Test solutions for histochemical detection
A.6.3.1	Chloral hydrate test solution
A.6.3.2	Cuoxam test solution

- A.6.3.3 Ferric chloride test solution
- A.6.3.4 Fuchsin glycerine gelatin
- A.6.3.5 Glycerol-acetic acid test solution
- A.6.3.6 Iodine test solution
- A.6.3.7 Mercuric nitrate test solution
- A.6.3.8 α-Naphthol test solution
- A.6.3.9 Phloroglucinol test solution
- A.6.3.10 Ruthenium red test solution
- A.6.3.11 Sudan III test solution
- A.6.3.12 Tissue-disintegrating solution (chromic-nitric acid test solution)
- A.6.3.13 Zinc chloride-iodine test solution

Page count: 10