

ภาคผนวก ก ผลวิเคราะห์ตัวอย่างด้วยวิธีซิลิการรณนา (THIN SECTION DESCRIPTIONS)  
จากแหล่งเตาบ้านดี ตำบลบราโหม อำเภอเมือง จังหวัดปัตตานี จำนวน 10 ตัวอย่าง  
โดยอาจารย์ประมวลพงษ์ สินธุเสน ผู้เชี่ยวชาญด้านวิเคราะห์จ้ยดิน ด้านกายภาพ  
แห่งสำนักวิทยาศาสตร์เพื่อการพัฒนาที่ดิน กรมพัฒนาที่ดิน

### ตัวอย่างที่ 1

#### Basic mineral components.

c/f limit at 10  $\mu\text{m}$ , ratio of 15:85

**Coarse fraction:** The mineral grains almost are single grains, mainly silt size to fine sand size, few coarse sand size, an angular to subrounded, few feldspar, poorly sorted.

**Fine fraction:** Brown, clay to fine silt sized material, speckled appear under transmitted light.

#### Basic organic components.

Few amorphous organic fine material.

#### Groundmass

The c/f related distribution pattern is open porphyric, the b-fabric of the micromass is parallel striated, and at the surface (thickness  $\approx 200 \mu\text{m}$ ) show undifferentiated (isotropic) b-fabric.

#### Void patterns.

Generally are channels (100  $\mu\text{m}$  width), not interconnected and show parallel orientation. Estimated total void space 5% of the area of the thin section.

### ตัวอย่างที่ 2

#### Basic mineral components.

c/f limit at 10  $\mu\text{m}$ , ratio of 15:85

**Coarse fraction:** The mineral grains almost are single quartz grains, mainly medium sand to coarse sand size, few silt size, to very fine sand size, angular, frequent sericite, few muscovite and polycrystalline quartz, poorly sorted.

**Fine fraction:** Reddish brown, clay to fine silt sized material, speckled appear under transmitted light.

#### Basic organic components.

Very few humified plant tissue residues.

#### Groundmass

The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is stipple-speckled b-fabric.

#### Void patterns.

Few channels, and very few chambers, estimated total void space 2%

### ตัวอย่างที่ 3

#### Basic mineral components.

c/f limit at 10  $\mu\text{m}$ , ratio of 20:80

**Coarse fraction:** The mineral grains almost are single quartz grains, silt size to medium sand size, few feldspar, broken quartz, very few chert fragments; angular, rare highly weathered biotite, poorly sorted.

**Fine fraction:** Grayish brown grading to brown, clay to fine silt sized material, speckled appear under transmitted light.

#### Basic organic components.

Few humified plant tissue residues and the organic pigment staining to the micromass.

#### Groundmass

The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is parallel striated, and at the surface (thickness  $\approx 100 \mu\text{m}$ ) show undifferentiated (isotropic) b-fabric.

#### Void patterns.

Very few channels, and short planar voids, generally have parallel orientation and present about 2% of the area of the thin section.

### ตัวอย่างที่ 4

#### Basic mineral components.

c/f limit at 10  $\mu\text{m}$ , ratio of 25:75

**Coarse fraction:** The mineral grains are dominant in single quartz grains, fine sand to coarse sand size, angular, frequent micas (muscovite and biotite) few fragments; moderately sorted.

**Fine fraction:** Reddish brown, clay to fine sized material, speckled appear under transmitted light.

#### Basic organic components.

Very few humified plant tissue residues.

#### Groundmass

The c/f related distribution pattern is close porphyric, the b-fabric of the micromass is mosaic speckled b-fabric.

**Void patterns.**

Very few vughs ; estimated total voids space 2% of the thin section area.

**ตัวอย่างที่ 5**

**Basic mineral components.**

c/f limit at 10  $\mu$ m, ratio of 10:90

**Coarse fraction:** Dominant in single quartz grains, silt size to medium sand size, angular, frequent sericite and very feldspar; poorly sorted.

**Fine fraction:** Pale yellowish gray, clay to fine sized material, limpid aspect under transmitted light.

**Basic organic components.**

Very few punctuation and the amorphous organic fine material.

**Groundmass**

The c/f related distribution pattern is open porphyric, the b-fabric of the micromass is stipple-speckled b-fabric.

**Void patterns.**

Very few vughs which cover about 2% of the thin section area.

**ตัวอย่างที่ 6**

**Basic mineral components.**

c/f limit at 10  $\mu$ m, ratio of 5:95

**Coarse fraction:** Dominant in single quartz grains, sized range from very fine sand to coarse sand size, angular, few micas, moderately sorted.

**Fine fraction:** Reddish brown, clay to fine sized material, speckled appear under transmitted light.

**Basic organic components.**

Few humified plant tissue residues and punctuation.

**Groundmass**

The c/f related distribution pattern is open porphyric, the b-fabric of the micromass is mosaic speckled b-fabric.

**Void patterns.**

Very few vughs and channels, estimated total voids space 2% of the thin section area.

**ตัวอย่างที่ 7**

**Basic mineral components.**

c/f limit at 10  $\mu\text{m}$ , ratio of 10:90

**Coarse fraction:** Dominant in single quartz grains, silt sized to coarse sand size, angular, frequent micas, few polycrystalline quartz and granite rock fragments; poorly sorted.

**Fine fraction:** Yellowish brown, clay to fine sized material, speckled appear under transmitted light.

**Basic organic components.**

None present.

**Groundmass**

The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is stipple speckled b-fabric.

**Void patterns.**

Few vughs, irregular shape and various size which cover about 5% of the thin section area.

**ตัวอย่างที่ 8**

**Basic mineral components.**

c/f limit at 10  $\mu\text{m}$ , ratio of 20:80

**Coarse fraction:** The single quartz grains, silt sized to medium sand size are dominant, few grains are in very coarse sand size, angular to subrounded; poorly sorted, angular to subrounded; poorly sorted, very few feldspar.

**Fine fraction:** Gray, clay to fine sized material, dotted appear under transmitted light.

**Basic organic components.**

Generally are the amorphous organic fine material, punctuation and the organic pigment.

**Groundmass**

The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is weakly stipple speckled to undifferentiated.

**Void patterns.**

Generally are short planar void, few vughs. Estimated total voids space 5%.

**ตัวอย่างที่ 9****Basic mineral components.**

c/f limit at 10  $\mu\text{m}$ , ratio of 15:85

**Coarse fraction:** The mineral grains almost are single quartz grains, silt sized to medium sand size, angular, frequent sericite, few micas and quartzite rock fragments; moderately sorted.

**Fine fraction:** Yellowish gray, clay to fine sized material, dotted appear under transmitted light.

**Basic organic components.**

Generally are the amorphous organic pigment staining to the micromass and punctuations, few amorphous organic fine material.

**Groundmass**

The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is stipple speckled b-fabric.

**Void patterns.**

Mainly are channels and usually have parallel orientation, cover 5% of the thin section area.

**ตัวอย่างที่ 10****Basic mineral components.**

c/f limit at 10  $\mu\text{m}$ , ratio of 20:80

**Coarse fraction:** Dominant in single quartz grains, silt sized to medium sand size, few grains are in coarse sand size, angular, frequent sericite and micas, very few feldspar; poorly sorted.

**Fine fraction:** Pale yellowish, clay to fine silt sized material, speckled appear under transmitted light.

**Basic organic components.**

Few humified plant tissue residues and punctuation.

**Groundmass**

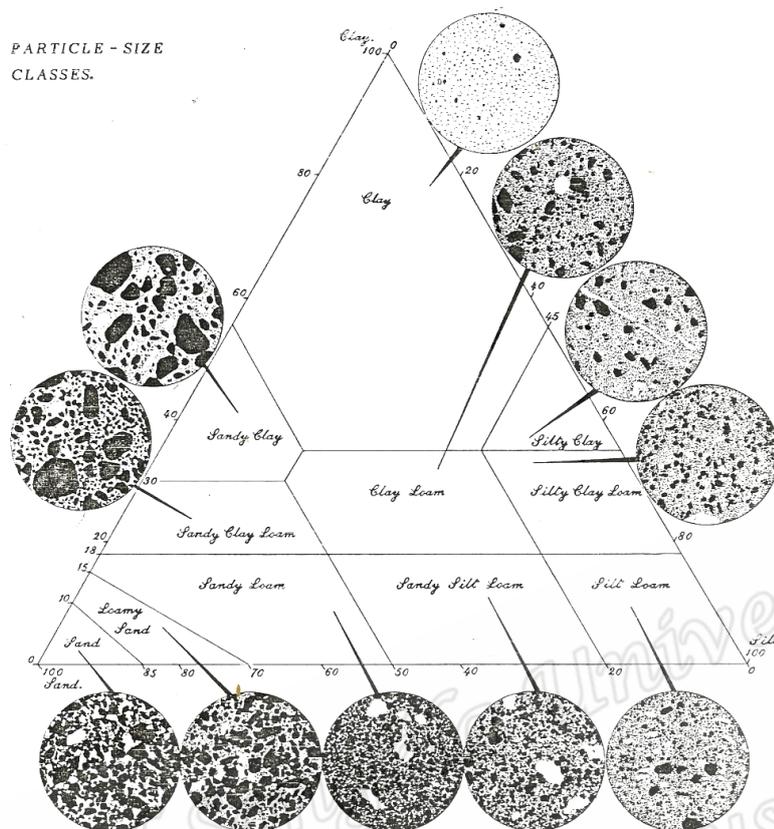
The c/f related distribution pattern is open to close porphyric, the b-fabric of the micromass is stipple speckled b-fabric.

Void patterns.

Very few vughs cover about 2% of the thin section area.

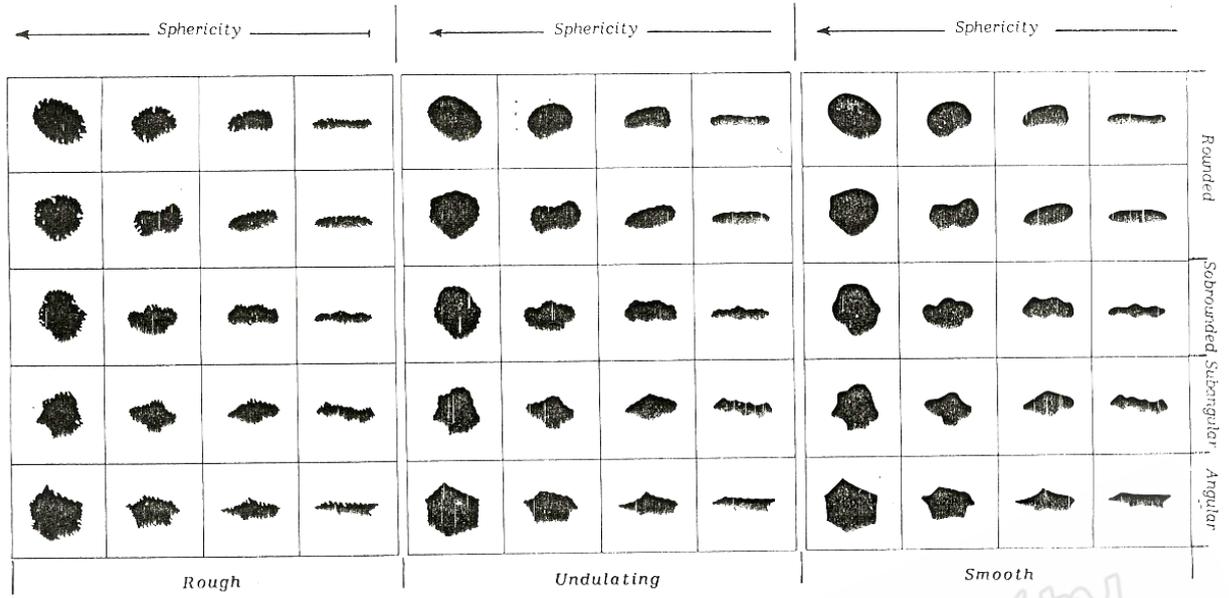
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ภาคผนวก ข ภาพแสดงลักษณะของเนื้อดิน, ลักษณะของขอบแร่ และปริมาณของแร่เนื้อหยาบ



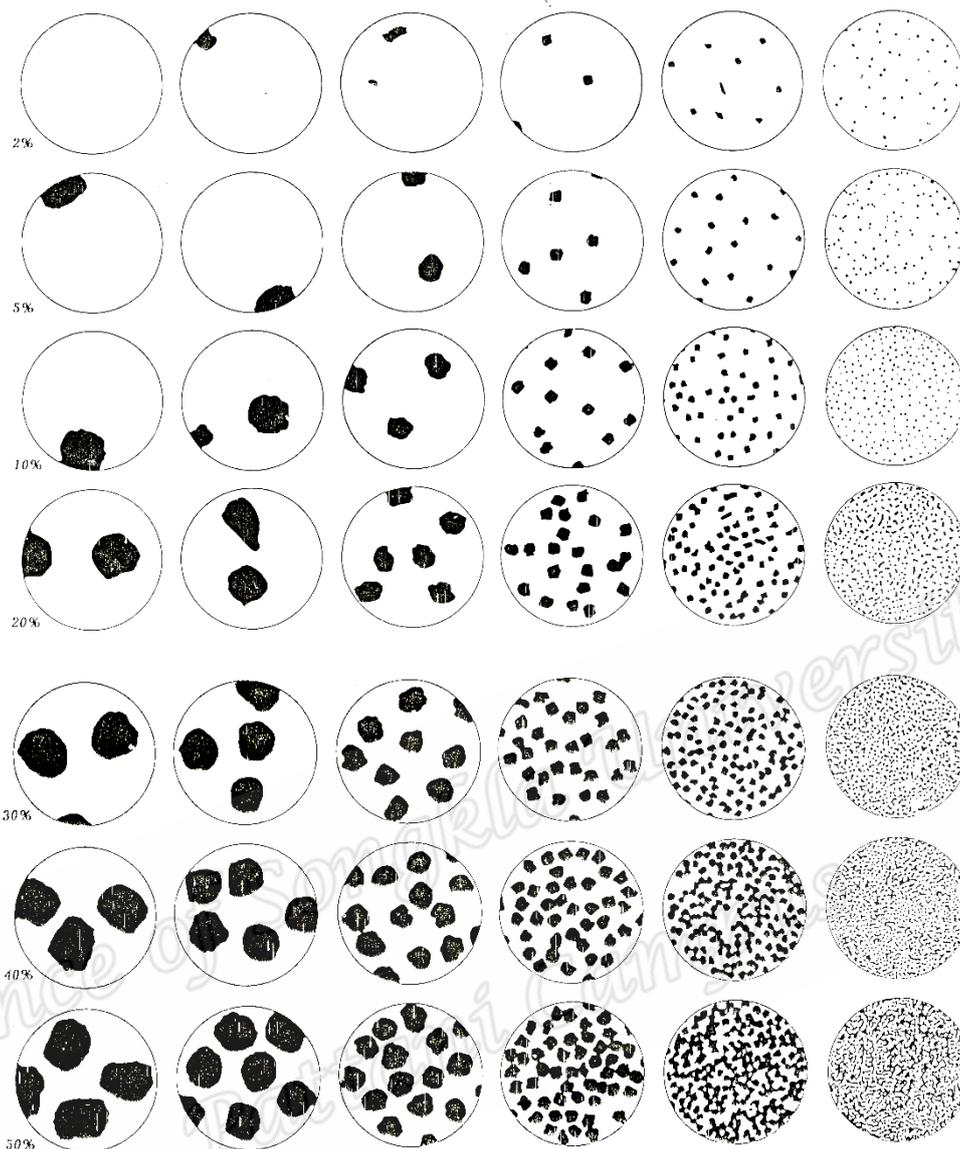
ภาพแสดงลักษณะของเนื้อดิน

ที่มา : Bullock, and other 1985 : 22



ภาพแสดงลักษณะขอบของแร่  
ที่มา : Bullock, and other 1985 : 31

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ภาพแสดงปริมาณของแร่เนื้อหยาบ

ที่มา : Bullock, and other 1985 : 24-25