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LAMPIRAN

Lampiran 1. Deskripsi Profil

P1

Location name: Triwidadi, Pajangan District, Bantul Regency

Vegetation: Teak Tree and grass

Land Use: Secondary Forest

Parent Material: Limestone and Marl

Geological age: Middle Miocene–Pliocene

Topography: Undulating

Soil Classification: Very Fine, Smectitic, Superactive, Isohyperthermic, Typic Haprendolls

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0-21/34	A	Very dark brown (10YR 2/2) moist; gravelly clay; moderate, coarse, granular structure; firm, very plastic; many fine and medium roots; about 15% by volume gravel size limestone fragment; violently effervescent (HCl); moderately alkaline (pH 8); gradual, wavy boundary.
21/34-52/60	Bw/2Cr	Bw Part: very dark grayish brown (10YR 3/2) clay, dark grayish (7.5YR 4/1) moist; weak fine angular blocky; firm; very plastic; few fine and very fine roots; common pressure faces; about 7% by volume fine gravel size limestone fragment; strongly effervescent (HCl); moderately alkaline (pH 8); 2Cr part: Pale brown (2,5Y 8/2) silty loam, massive, friable, very plastic; very few very fine roots; violently effervescent (HCl); moderately alkaline (pH 8); clear, irregular boundary.
52/60-220+	R	Limestone bedrock with some cracks

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P2

Location name: Argodadi, Sedayu District, Bantul Regency

Vegetation: paddy-chilli (rotation)

Land Use: upland paddy field

Parent Material: Colluvium Limestone-Aluvium

Geological age: Quaternary (?)

Topography: Gently sloping

Soil Classification: Very fine, smectitic, Superactive, Isohyperthermic, Mollic Fluvaquents

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0–18/22	Ap	Very dark gray (2.5Y 3/1) gravelly clay, moist; moderate, coarse, angular clods; firm, very plastic; many fine and medium roots; about 25% by volume fine gravel size limestone fragment; strongly effervescent; moderately alkaline (pH 8); clear wavy boundary.
18/22–75/82	Cg1	Gray (5Y 5/1) gravelly clay, moist; massive; friable, very plastic, very few very fine and fine roots; about 15% by volume coarse gravel size limestone fragment; strongly effervescent; moderately alkaline (pH 8); diffuse wavy boundary.
75/82–141	2Cg2	Dark Yellowish Brown (10YR 4/4) gravelly clay loam, Gray (2,5Y 6/1) moist; massive; friable, moderately plastic; very few very fine roots; 25% gravel; slightly effervescent; moderately alkaline (pH 8); gradual smooth boundary.
141–150	3Cg3	Gray (2.5Y 5/1) silty clay loam, moist; massive; friable, moderately plastic; 10% gravel; very slightly effervescent; moderately alkaline (pH 8).

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P3

Location name: Sumberrahayu, Moyudan District, Bantul Regency

Vegetation: paddy

Land Use: lowland paddy field

Parent Material: Clay Alluvium

Geological age: Quaternary (?)

Topography: Nearly level

Soil Classification: Fine, smectitic, superactive, Isohyperthermic, Typic Epiaquerts

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0–22/25	Apg1	Very dark grayish Brown (2.5Y 3/2) clay, dark red (2,5YR 3/6) moist; massive; firm, very plastic; many fine and medium roots; effervescent; slightly acid (pH 6,5); gradual wavy boundary.
22/25–40/44	Apg2	Gray (2.5Y 5/1) clay, grayish brown (2.5Y 5/2), moist, many dark red (2,5YR 3/6) mottles; massive; firm, very plastic, few very fine roots; moderately alkaline (pH 8); clear wavy boundary.
43/48–80/84	2B(ss)g	Gray (5 Y 5/1) clay, dark gray (5Y 4/1) moist; weak, medium, angular blocky; firm, very plastic; few very fine roots; many stress surfaces; common fine prominent brownish yellow (10YR 6/8) masses of oxidized iron with clear boundaries lining pores; few pitted concretions of calcium carbonate; moderately alkaline (pH 8); clear wavy boundary.
80/84–102/110	2B(ss)g	Dark gray (5Y 4/1) clay, gray (5 Y 5/1) moist; strong; friable, weak, medium, wedge structure; very plastic; many slickensides; many yellowish brown (10YR 5/6) masses of oxidized iron with diffuse boundaries along slickenside faces; few pitted concretions of calcium carbonate; few very dark brown (10YR 2/2) iron-manganese nodules across; strongly alkaline (pH 8,5); clear wavy boundary.
102/110–115/120	2Bkg	Pale Yellow (2.5Y 8/2) clay coating with carbonate, moist; moderate fine angular blocky structure, firm, very plastic; violently effervescent (HCl) carbonate masses; moderately alkaline (pH 8); abrupt broken boundary
115/120–160+	3Cg	Gray (5Y 5/1) clay loam, light yellowish brown (7.5YR 6/4); massive; firm, plastic; many iron-manganese nodules across; 10% gravel; very slightly effervescent (HCl); moderately alkaline (pH 8)

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P4

Location name: Margoluwih, Seyegan District, Sleman Regency

Vegetation: paddy

Land Use: lowland paddy field

Parent Material: Quaternary Volcanic Deposit

Geological age: Quaternary

Topography: Nearly level

Soil Classification: Fine-loamy, mixed, superactive, isohyperthermic, Typic Fragiaquepts

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0–22	Apg	Dark grayish Brown (10YR 4/2) loam, pale brown (10YR 6/3) especially in lower part, moist; massive; friable, slightly plastic; many fine and medium roots; moderately acid (pH 6); clear smooth boundary.
22-33	Ad	Very dark grayish Brown (10YR 3/2) sandy loam, light yellowish brown (10YR 6/4) iron oxide layer with 3-6 cm thick in lower part, moist; massive; extremely firm, slightly plastic; few fine roots; neutral (pH 7); clear smooth boundary.
33-47	Bg1	Very dark grayish brown (10YR 3/2) loam, moist; weak, fine, angular blocky; firm, slightly plastic; few fine roots; many fine, distinct, very dark brown (10YR 2/2) Mn mottles; neutral (pH 7); clear smooth boundary.
47-65	Bg2	Gray (10YR 4/1) sandy loam, moist; weak, fine, angular blocky; firm, slightly plastic; few fine roots; many fine, faint, dark brown (10YR 3/3) Mn mottles; neutral (pH 7); gradual smooth boundary.
65-78	Bg3	Gray (10YR 4/1) sandy loam, moist; weak, fine, angular blocky; very firm, slightly plastic; few fine roots; many fine to medium, distinct, dark brown (10YR 3/3) Fe/Mn masses, neutral (pH 7); abrupt smooth boundary
78-94	Bsm1	Weak red (2.5YR 4/2) to reddish brown (2.5YR 4/4) loam cemented by iron oxide, Gray (10YR 4/1) moist; massive; rigid, slightly plastic; few fine roots; neutral (pH 7); abrupt smooth boundary
94-110	Bsm2	Very dark grey (10YR 3/1) to dark brown (10YR 3/3) clay loam cemented by Mn/Fe oxide, reddish brown (2.5YR 4/4) moist; massive; rigid, slightly plastic; few fine roots; neutral (pH 7); diffuse smooth boundary
110-150	2Bg4	Dark brown (10YR 3/3), Very dark gray (10YR 3/1) clay loam moist; weak, fine, angular blocky; firm, slightly plastic; few fine roots; neutral (pH 7)

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P5

Location name: Wukirsari, Imogiri District, Bantul Regency

Vegetation: Teak Tree, Grass

Land Use: Secondary Forest

Parent Material: Sandstone, Tertiary Volcanic Tuff

Geological age: Early Miocene-Middle Miocene

Topography: Undulating

Soil Classification: Fine, smectitic, superactive, isohyperthermic, Lithic Udorthents

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0-20	A	Dark brown (7.5YR 3/4) clay loam, moist; weak, fine, subangular blocky; firm, slightly plastic; many fine, medium, and coarse roots; moderately acid (pH 5,5); abrupt smooth boundary.
20-24/50	AC	Pale Brown (10YR 6/3) clay loam, pale red (2,5YR 4/4), Pale yellow (2,5Y 8/2), moist; massive; firm, slightly plastic; many fine, medium, and coarse roots; many iron oxide masses in root channels; moderately acid (pH 5,5); abrupt irregular boundary.
24/50+	R	Sandstone and Tuff bedrock

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P6

Location name: Segoroyoso, Imogiri District, Bantul Regency

Vegetation: paddy

Land Use: lowland paddy field

Parent Material: Clay Alluvium

Geological age: Quaternary (?)

Topography: Nearly level

Soil Classification: Fine, smectitic, superactive, Isohyperthermic, Typic Epiaquerts

Morfologi Profil Tanah

Depth (cm)	Horizons	Soil Profile Description
0-27/30	Apg	Very dark gray (7.5YR 3/1) silty clay, dark gray (10YR 4/1) moist; moderate, medium, prismatic structure parting to moderate, coarse, subangular blocky structure; firm, very plastic; many fine and medium roots; common fine, distinct, brown (7,5YR 4/3) iron mottles; slightly acid (pH 6); clear wavy boundary.
27/30-56/62	Bg	Very dark grayish brown (10YR 3/2) silty clay loam, dark gray (10YR 4/1)moist; weak, medium, subangular blocky structure; firm, very plastic; few fine roots; many fine, distinct, very dark grayish (10YR 3/1) Mn mottles throughout, few fine, faint, brown (7,5YR 4/3) iron mottles in upper part; neutral (pH 7); gradual wavy boundary.
56/62-90/93	B(ss)g	Dark gray (10YR 4/1) clay, moist; weak, medium, subangular blocky structure; firm, very plastic; few fine roots; many stress surfaces; many slickensides; many fine, distinct, very dark grayish (10YR 3/1) Mn mottles throughout; neutral (pH 7); clear wavy boundary.
90/93-110	BC	Very dark grayish brown (10YR 3/2) clay, moist; weak, medium, subangular blocky structure; firm, very plastic; few fine roots; neutral (pH 7); abrupt wavy boundary.
110-170+	2B(ss)g	Dark greyish (2.5Y 4/1) clay, moist; weak, fine, wedge structure parting to weak, fine, angular blocky, firm, very plastic; many Mn concretion; many slickensides; slightly alkaline (pH 7,5)

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P7

Location name: Pleret, Imogiri District, Bantul Regency

Vegetation: paddy

Land Use: lowland paddy field

Parent Material: Quaternary Volcanic Deposit

Geological age: Quaternary

Topography: Nearly level

Soil Classification: Coarse-loamy over sandy-skeletal, mixed, isohyperthermic, Typic Epiaquepts

Morfologi Profil Tanah

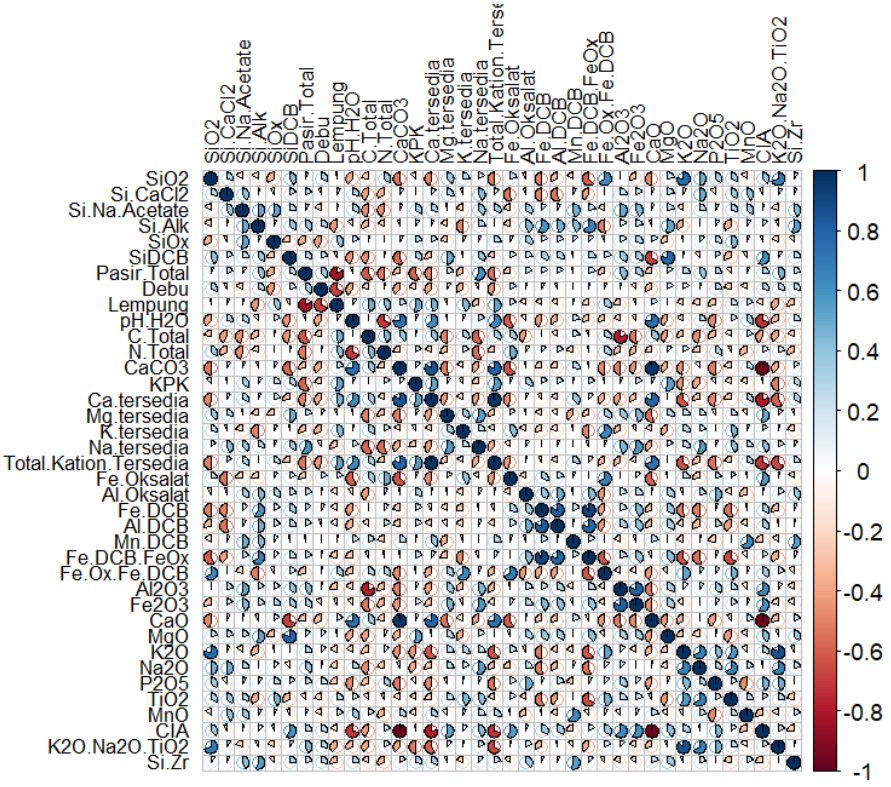
Depth (cm)	Horizons	Soil Profile Description
0-17	Ap	Gray (10YR 4/1) sandy clay loam, moist; weak, fine, granular; friable, slightly plastic; many fine and medium roots; moderately acid (pH 6); clear smooth boundary.
17-40	Bg1	Very dark grayish Brown (10YR 3/2) sandy loam, gray (10YR 4/1), moist; weak, medium, granular; very friable, slightly plastic; 3-5% medium gravel; common fine roots; many fine, distinct, yellowish red (5YR 4/6) Fe mottles; slightly acid (pH 6,5); clear smooth boundary.
40-48	Bg2	Very dark grayish Brown (10YR 3/2) sandy loam, gray (10YR 4/1), moist; weak, medium, granular; very friable, slightly plastic; 3-5% medium gravel; few fine roots; many fine, distinct, black (10YR 2/1) Mn mottles; slightly acid (pH 6,5); clear smooth boundary.
48-68	C1	Gray (10YR 4/1) gravelly coarse sand, about 35% fine gravel and 15% coarse gravel; single grain; loose, nonplastic; few fine roots; slightly acid (pH 6,5); clear smooth boundary.
68-110	C2	Gray (10YR 4/1) very cobbly coarse sand, about 50% cobbles and 15% coarse gravel; single grain; loose, nonplastic; few fine roots; slightly acid (pH 6,5); abrupt smooth boundary.
110-121	2C3	Yellow (2,5Y 7/8) cobble deposit; clear smooth boundary.
121-170	3C4	Gray (10YR 4/1) coarse sand, moist; single grain; loose, nonplastic; slightly acid (pH 6,5)

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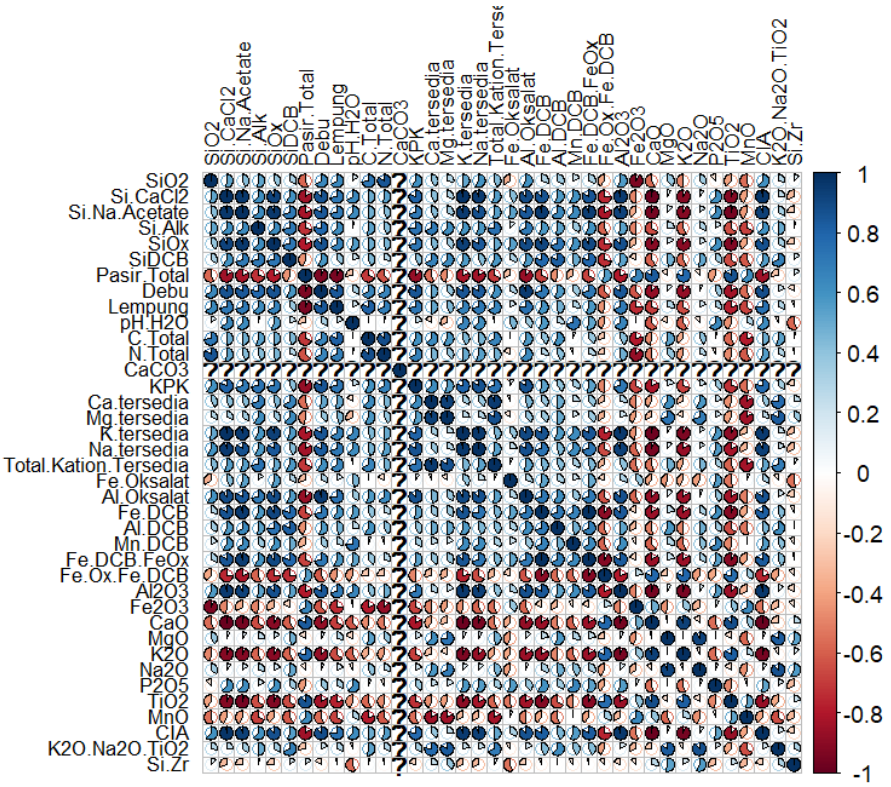
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Lampiran 3. Korelasi Spearman

Tanah Halus



Tanah Kasar



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