

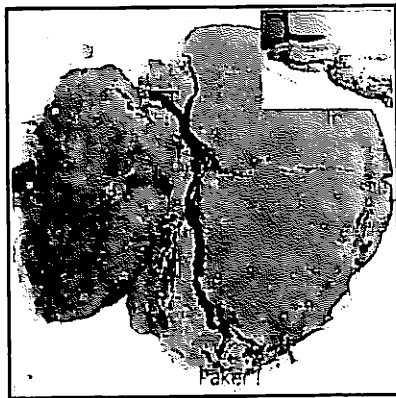


LAMPIRAN I

IDENTIFIKASI AKAR BAMBU

Identifikasi Akar Bambu Banyumanik (Paket I)

Kuat Geser Tanah (Shear Strength)



Gambar Akar

Ø
(mm)

L
(cm)

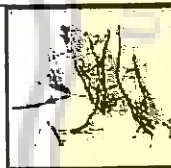
Σ
Akar

Berat
(mg)



0,1

1,7 – 3,8

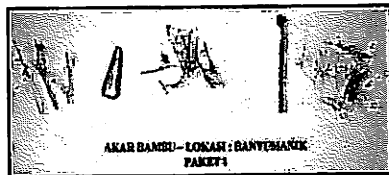


0,2

2,4 – 6,0

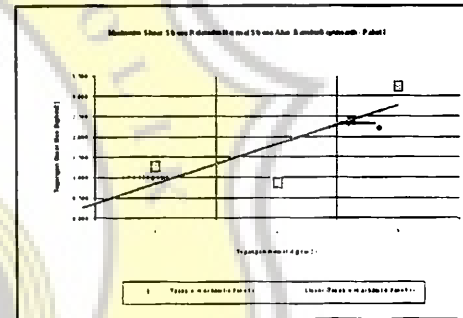
18
helai
akar

100



0,3 -0,4

2,5 – 3,5



C
(kg/cm²)

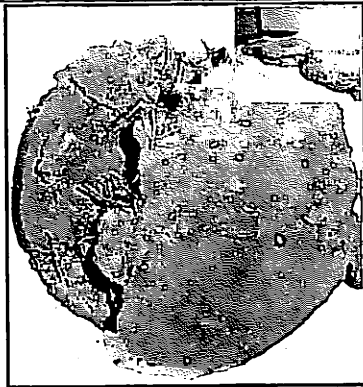
φ (°)

0,32

22

**Identifikasi Akar Bambu Banyumanik
(Paket II)**

Kuat Geser Tanah (Shear Strength)



Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)

C
(kg/cm²)

φ (°)



0,1

2,1 – 4,5



0,2

1,5 – 3,7

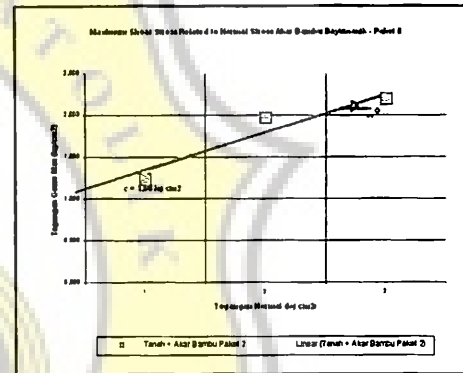
12
helai
akar

100



1,1

5,6



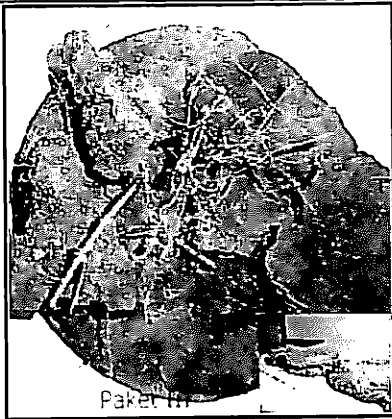
1,08

11



**Identifikasi Akar Bambu Banyumanik
(Paket III)**

Kuat Geser Tanah (Shear Strength)



Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)



0,01-0,02

2,3-10,5

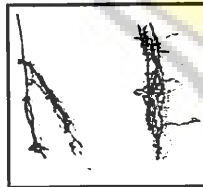


0,1

2,0-2,5

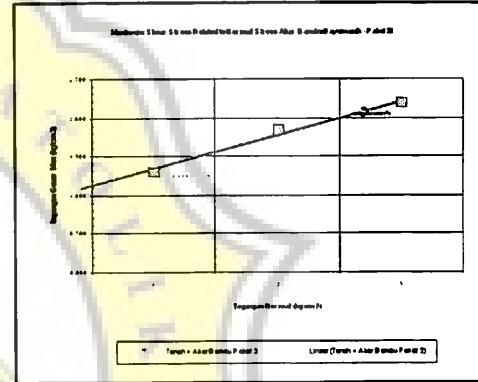
13
helai
akar

100



0,2-0,3

2,0-7,5



C
(kg/cm²)

φ (°)

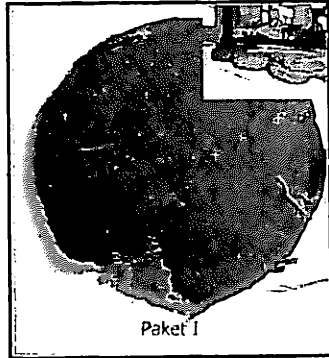
1,11

15



**Identifikasi Akar Bambu Tembalang
(Paket I)**

Kuat Geser Tanah (Shear Strength)



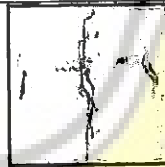
Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)



0,1 – 0,2

1,3 – 2,8

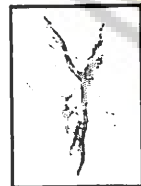


0,3

1,8 – 2,8

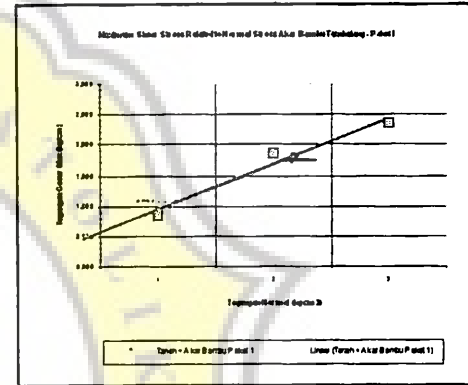
9
helai
akar

100



0,5 – 0,6

4,0 – 4,5



C
(kg/cm²)

φ (°)

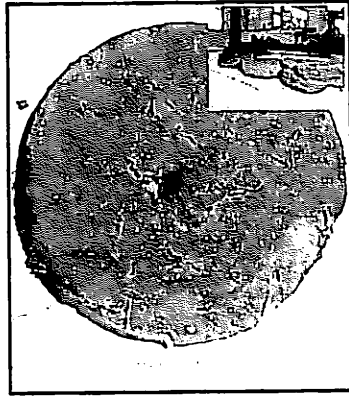
0,52

20



Identifikasi Akar Bambu Tembalang (Paket II)

Kuat Geser Tanah (Shear Strength)



Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)



0,1 - 0,2

1,0 - 5,0

19

50

helai
akar



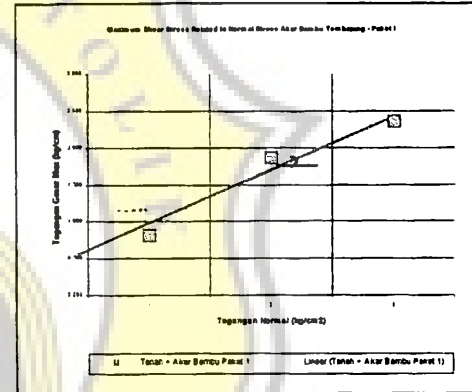
0,3 - 0,4

2,0 - 4,6



0,5 - 1,4

3,5 - 6,0



C
(kg/cm²)

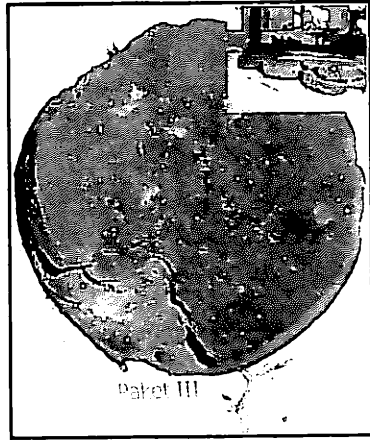
φ (°)

0,64

18

Identifikasi Akar Bambu Tembalang (Paket III)

Kuat Geser Tanah (Shear Strength)



Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)



0,1 – 0,3

1,8 – 4,0

13
helai
akar

300



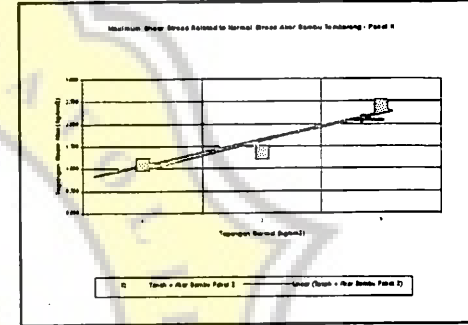
0,4 – 0,6

1,6 – 3,5



1,3 –
2,13

3,2 – 5,3



C
(kg/cm²)

φ (°)

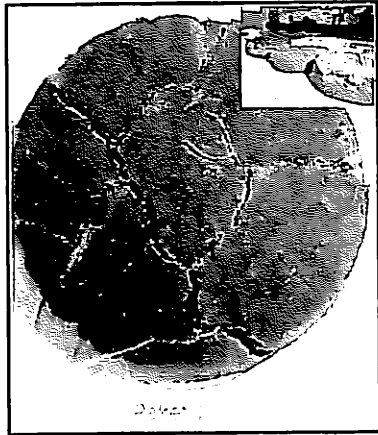
0,31

22



Identifikasi Akar Bambu Gajahmungkur (Paket I)

Kuat Geser Tanah (Shear Strength)



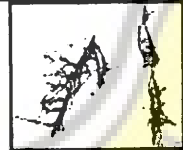
Gambar Akar

Ø
(mm)

L
(cm)

Σ
Akar

Berat
(mg)



0,2 - 0,3

2,5-4,2



0,4

2,2-3,4

8
helai
akar

100

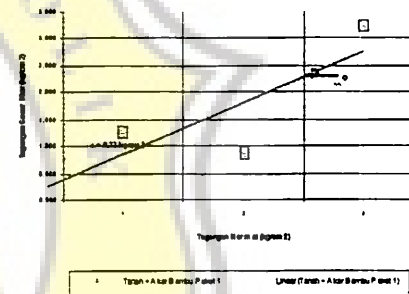


0,5-0,6

0,5-0,6



Diagram yang ditunjukkan di atas adalah hasil dari uji geser tanah pada akar bambu Gajahmungkur - Paket I

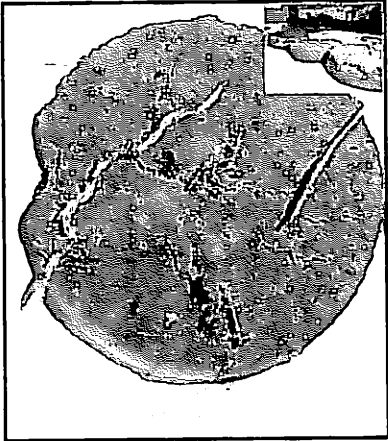

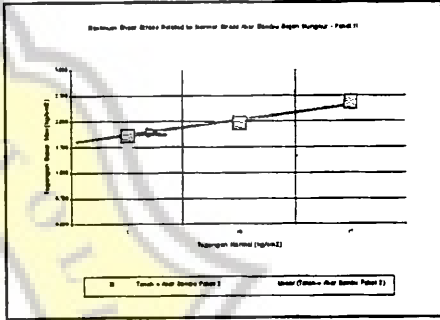





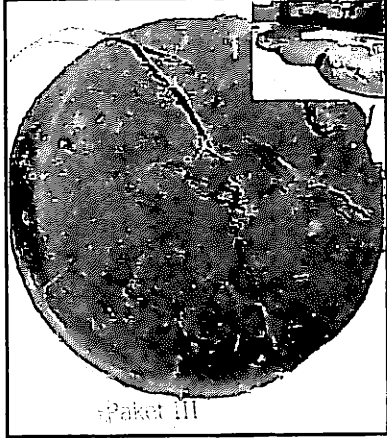
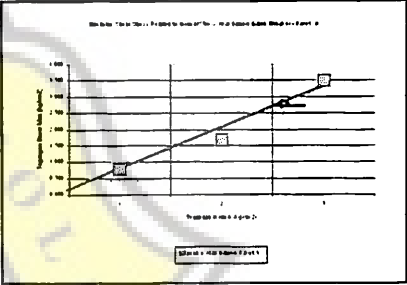
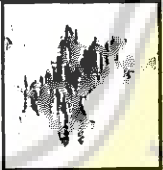


C
(kg/cm²)

φ (°)

0,59

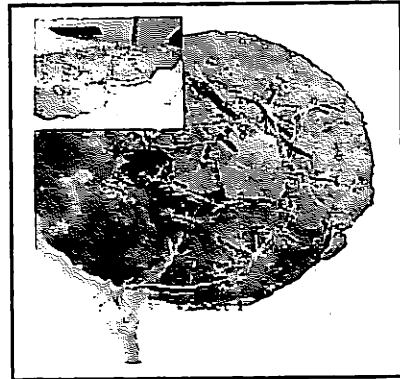
20

| Identifikasi Akar Bambu Gajahmungkur (Paket II) | | | | | | Kuat Geser Tanah (Shear Strength) | | | |
|---|---|-----------|-----------|---------------------|---------------|---|----------------------------|-------|----|
|   AKAR BAMBU - LOKASI : GAJAH MUNGKUR PAKET 2 | Gambar Akar | Ø (mm) | L (cm) | Σ Akar | Berat (mg) |  | C (kg/cm ²) | φ (°) | |
| |  | 0,2-0,3 | 1,9-3,7 | 10 helai akar | 100 | | | 1,53 | 10 |
| |  | 0,5-0,6 | 2,3-4,0 | | | | | | |
| |  | 0,9 | 4,3 | | | | | | |

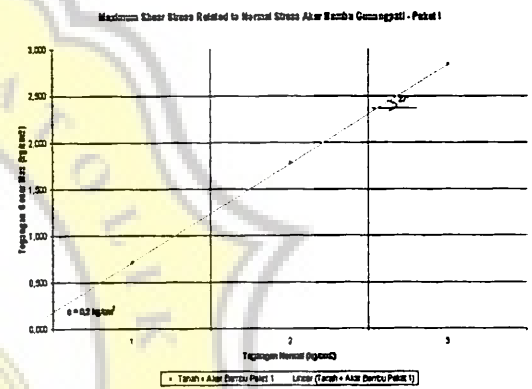
| Identifikasi Akar Bambu Gajahmungkur (Paket III) | | | | | | Kuat Geser Tanah (Shear Strength) | | | | |
|--|--|---------------------|-----------|---------------------|---------------|---|----------------------------|------------|-----|----|
|  <p>Paket III</p> | Gambar Akar | \emptyset (mm) | L (cm) | Σ Akar | Berat (mg) |  | C (kg/cm ²) | ϕ (°) | | |
| |  | 0,1-0,4 | 0,5-4,0 | 11 helai akar | 300 | | | | 0.1 | 27 |
| |  | 0,5-1,2 | 4,2-5,7 | | | | | | | |
| |  | 1,34-2,0 | 2,8-7,0 | | | | | | | |

Identifikasi Akar Bambu Gunungpati (Paket I)

Kuat Geser Tanah (Shear Strength)



| Gambar Akar | Ø (mm) | L (cm) | Σ Akar | Berat (mg) |
|-------------|---------|-----------|---------------|------------|
| | 0.1-0.3 | 3.0 - 5.0 | 15 helai akar | 100 |
| | 0.4-0.6 | 3.0 - 6.0 | | |
| | 0.9-1.3 | 3.0 - 6.0 | | |

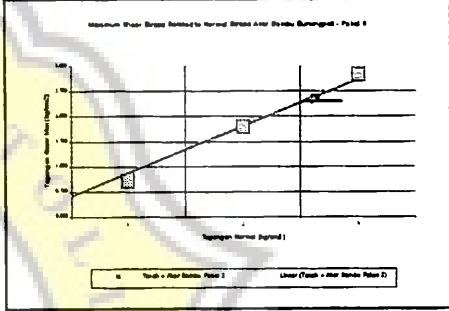






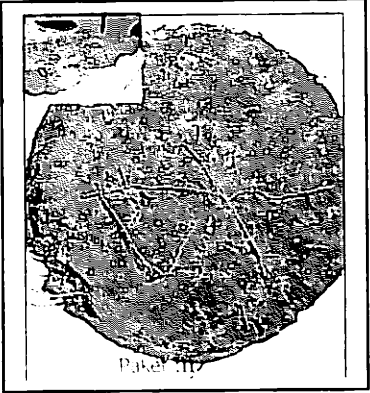
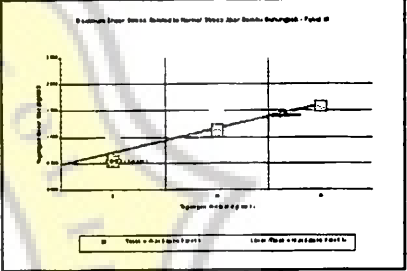


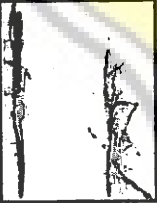
| C (kg/cm ²) | φ (°) |
|-------------------------|-------|
| 0.2 | 27 |

L-10

**Identifikasi Akar Bambu Gunungpati
(Paket II)**

Kuat Geser Tanah (Shear Strength)

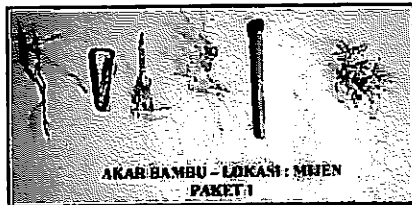
| Gambar Akar | Ø (mm) | L (cm) | Σ Akar | Berat (mg) |  | C (kg/cm ²) | φ (°) |
|--|-----------|-----------|---------------------|---------------|---|----------------------------|-------|
| | | | | | | | |
|  | 0,1 | 2-5 | 19 helai akar | 100 | | 0,20 | 27 |
|  | 0,2 | 1,5-3,8 | | | | | |
|  | 1,1 | 5,6 | | | | | |
|  | | | | | | | |

| Identifikasi Akar Bambu Gunungpati (Paket III) | | | | | | Kuat Geser Tanah (Shear Strength) | | | | |
|---|---|---------------------|-----------|---------------------|---------------|---|----------------------------|------------|------|----|
|  | Gambar Akar | \emptyset (mm) | L (cm) | Σ Akar | Berat (mg) |  | C (kg/cm ²) | ϕ (°) | | |
| |  | 0.1-0.2 | 1.8-3.4 | 15 helai akar | 100 | | | | 0.31 | 17 |
| |  | 0.3-0.4 | 1.2-4.2 | | | | | | | |
| |  | 0.5-0.8 | 2.7-5.8 | | | | | | | |

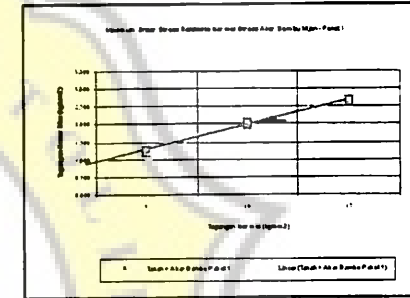


**Identifikasi Akar Bambu Mijen
(Paket I)**

Kuat Geser Tanah (Shear Strength)



| Gambar Akar | Ø (mm) | L (cm) | Σ Akar | Berat (mg) |
|-------------|-----------|-----------|---------------------|---------------|
| | 0,1 | 1,0-5,0 | 12 helai akar | 100 |
| | 0,2-0,3 | 1,5-4,0 | | |
| | 0,5 | 5,0 | | |



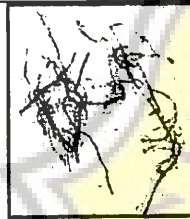
| C (kg/cm ²) | φ (°) |
|----------------------------|-------|
| 0,9 | 17 |

**Identifikasi Akar Bambu Mijen
(Paket II)**

Kuat Geser Tanah (Shear Strength)



Gambar Akar



Ø
(mm)

0,2-0,3

0,4-0,5

0,9-1,2

L
(cm)

3,3-6,1

2,7-5,3

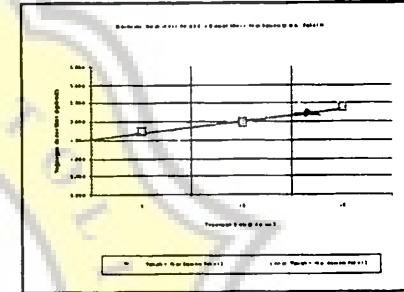
4,8-5,8

Σ
Akar

14
helai
akar

Berat
(mg)

200



C
(kg/cm²)

1,51

φ (°)

8

**Identifikasi Akar Bambu Mijen
(Paket III)**

Kuat Geser Tanah (Shear Strength)



Gambar Akar



Ø
(mm)

0,1-0,2

0,5-0,7

1,0-1,4

L
(cm)

1,7-5,2

1,2-6,2

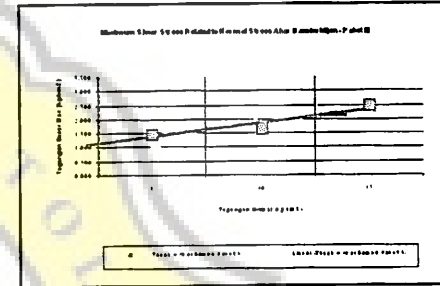
3,9-5,7

Σ
Akar

15
helai
akar

Berat
(mg)

200



C
(kg/cm²)

1,51

φ (°)

12

| AKAR BAMBU BANYUMANIK | |
|---------------------------------|--------------|
| PAKET I | |
| Berat tanah+akar bambu = 707 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2 |
| 0,1 | 2,7 |
| 0,1 | 2,5 |
| 0,1 | 3,6 |
| 0,1 | 3,5 |
| 0,1 | 2 |
| 0,1 | 3,2 |
| 0,1 | 1,8 |
| 0,1 | 1,7 |
| 0,1 | 2,7 |
| 0,1 | 3,8 |
| 0,2 | 6 |
| 0,2 | 2,8 |
| 0,2 | 2,4 |
| 0,3 | 3,3 |
| 0,3 | 4 |
| 0,4 | 3,5 |
| 0,4 | 2,5 |
| $\Sigma = 18$ buah akar | |

| AKAR BAMBU BANYUMANIK | |
|---------------------------------|--------------|
| PAKET II | |
| Berat tanah+akar bambu = 697 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2,1 |
| 0,1 | 2,6 |
| 0,1 | 3,4 |
| 0,1 | 4,5 |
| 0,2 | 1,5 |
| 0,2 | 2,2 |
| 0,2 | 2,4 |
| 0,2 | 3,7 |
| 0,2 | 2,6 |
| 0,2 | 2,7 |
| 0,2 | 3,8 |
| 1,1 | 5,6 |
| $\Sigma = 12$ buah akar | |

| AKAR BAMBU BANYUMANIK | |
|---------------------------------|--------------|
| PAKET III | |
| Berat tanah+akar bambu = 688 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,01 | 3,5 |
| 0,01 | 3 |
| 0,02 | 10,5 |
| 0,02 | 2,3 |
| 0,1 | 2,4 |
| 0,1 | 2 |
| 0,1 | 2,5 |
| 0,2 | 3,5 |
| 0,2 | 7,5 |
| 0,2 | 2,2 |
| 0,3 | 2 |
| 0,3 | 2 |
| 0,3 | 2,5 |
| $\Sigma = 13$ buah akar | |

| AKAR BAMBU TEMBALANG | |
|---------------------------------|--------------|
| PAKET I | |
| Berat tanah+akar bambu = 722 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2,8 |
| 0,2 | 1,3 |
| 0,2 | 1,8 |
| 0,2 | 1,8 |
| 0,2 | 2,6 |
| 0,3 | 1,8 |
| 0,3 | 4,4 |
| 0,5 | 4,1 |
| 0,6 | 4,5 |
| $\Sigma = 9$ buah akar | |

| AKAR BAMBU TEMBALANG | |
|---------------------------------|--------------|
| PAKET II | |
| Berat tanah+akar bambu = 786 gr | |
| Berat akar bambu = 50 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 1 |
| 0,1 | 1,5 |
| 0,1 | 2 |
| 0,1 | 4 |
| 0,2 | 1 |
| 0,2 | 1,5 |
| 0,2 | 3 |
| 0,2 | 2 |
| 0,2 | 2,5 |
| 0,2 | 1 |
| 0,2 | 2,5 |
| 0,2 | 5,2 |
| 0,3 | 2 |
| 0,3 | 3,7 |
| 0,3 | 4,6 |
| 0,4 | 2,3 |
| 0,4 | 2,5 |
| 0,5 | 3,5 |
| 1,4 | 6 |
| $\Sigma = 19$ buah akar | |

| AKAR BAMBU TEMBALANG | |
|---------------------------------|--------------|
| PAKET III | |
| Berat tanah+akar bambu = 636 gr | |
| Berat akar bambu = 300 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2,6 |
| 0,2 | 4 |
| 0,3 | 3,3 |
| 0,3 | 3,2 |
| 0,3 | 1,8 |
| 0,3 | 3,3 |
| 0,3 | 3 |
| 0,4 | 3,5 |
| 0,5 | 3,4 |
| 0,6 | 1,6 |
| 1,3 | 3,2 |
| 1,68 | 7,7 |
| 2,13 | 5,3 |
| $\Sigma = 13$ buah akar | |

| AKAR BAMBU GAJAHMUNGKUR | |
|---------------------------------|--------------|
| PAKET I | |
| Berat tanah+akar bambu = 759 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,2 | 3,5 |
| 0,2 | 3,8 |
| 0,2 | 2,5 |
| 0,3 | 4,2 |
| 0,4 | 3,4 |
| 0,4 | 2,2 |
| 0,5 | 3,6 |
| 0,6 | 5,4 |
| $\Sigma = 8$ buah akar | |

| AKAR BAMBU GAJAHMUNGKUR | |
|---------------------------------|--------------|
| PAKET II | |
| Berat tanah+akar bambu = 659 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,2 | 2,1 |
| 0,2 | 1,9 |
| 0,2 | 2,7 |
| 0,3 | 2,4 |
| 0,3 | 1,6 |
| 0,3 | 2,0 |
| 0,3 | 3,7 |
| 0,5 | 4,0 |
| 0,6 | 2,3 |
| 0,9 | 4,3 |
| $\Sigma = 10$ buah akar | |

| AKAR BAMBU GAJAHMUNGKUR | |
|---------------------------------|--------------|
| PAKET III | |
| Berat tanah+akar bambu = 643 gr | |
| Berat akar bambu = 300 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 1,0 |
| 0,1 | 7,5 |
| 0,3 | 0,5 |
| 0,3 | 3,0 |
| 0,3 | 4,0 |
| 0,4 | 4,0 |
| 0,4 | 4,0 |
| 0,5 | 5,7 |
| 1,2 | 4,2 |
| 1,34 | 7,0 |
| 2,0 | 2,8 |
| $\Sigma = 11$ buah akar | |

| AKAR BAMBU MIJEN | |
|---------------------------------|--------------|
| PAKET I | |
| Berat tanah+akar bambu = 597 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2 |
| 0,2 | 2 |
| 0,2 | 1 |
| 0,2 | 5 |
| 0,2 | 2,7 |
| 0,3 | 1,5 |
| 0,3 | 2,8 |
| 0,3 | 2,5 |
| 0,3 | 4 |
| 0,3 | 2,5 |
| 0,3 | 2,5 |
| 0,5 | 5 |
| $\Sigma = 12$ buah akar | |

| AKAR BAMBU MIJEN | |
|---------------------------------|--------------|
| PAKET II | |
| Berat tanah+akar bambu = 818 gr | |
| Berat akar bambu = 200 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,2 | 3,3 |
| 0,2 | 4,9 |
| 0,2 | 5,4 |
| 0,2 | 6 |
| 0,2 | 4 |
| 0,3 | 5 |
| 0,3 | 4,8 |
| 0,3 | 6,1 |
| 0,4 | 2,7 |
| 0,4 | 5,3 |
| 0,5 | 3,6 |
| 0,5 | 4,5 |
| 0,9 | 5,8 |
| 1,2 | 4,8 |
| $\Sigma = 14$ buah akar | |

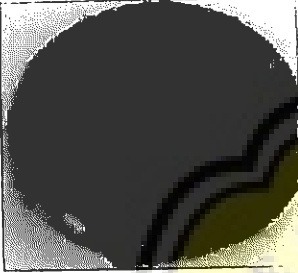
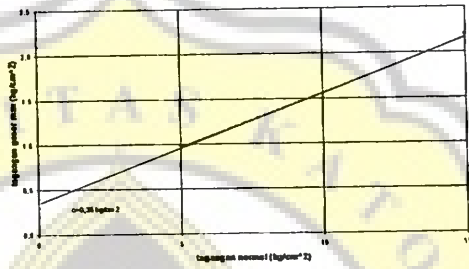
| AKAR BAMBU MIJEN | |
|---------------------------------|--------------|
| PAKET III | |
| Berat tanah+akar bambu = 696 gr | |
| Berat akar bambu = 200 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2,7 |
| 0,1 | 2,4 |
| 0,2 | 2,4 |
| 0,2 | 1,7 |
| 0,2 | 2,7 |
| 0,2 | 2 |
| 0,2 | 3,8 |
| 0,2 | 2,3 |
| 0,2 | 5,2 |
| 0,5 | 6,2 |
| 0,7 | 1,2 |
| 1,0 | 5,3 |
| 1,1 | 4 |
| 1,2 | 5,7 |
| 1,4 | 3,9 |
| $\Sigma = 15$ buah akar | |

| AKAR BAMBU GUNUNGPATI | |
|---------------------------------|--------------|
| PAKET I | |
| Berat tanah+akar bambu = 700 gr | |
| Berat akar bambu = 500 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 5 |
| 0,1 | 5 |
| 0,2 | 3 |
| 0,2 | 2,5 |
| 0,3 | 3 |
| 0,4 | 3,2 |
| 0,5 | 4 |
| 0,5 | 2,8 |
| 0,6 | 3 |
| 0,6 | 6,3 |
| 0,9 | 5,5 |
| 0,9 | 4,2 |
| 1,13 | 5,2 |
| 1,3 | 4 |
| 1,3 | 2,8 |
| $\Sigma = 15$ buah akar | |


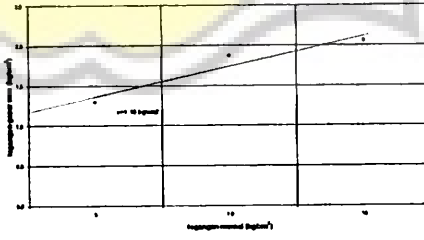
| AKAR BAMBU GUNUNGPATI | |
|---------------------------------|--------------|
| PAKET II | |
| Berat tanah+akar bambu = 682 gr | |
| Berat akar bambu = 300 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 4 |
| 0,1 | 3,8 |
| 0,1 | 6 |
| 0,1 | 5 |
| 0,2 | 3,4 |
| 0,2 | 3 |
| 0,2 | 5,2 |
| 0,2 | 5 |
| 0,2 | 4,5 |
| 0,2 | 3 |
| 0,2 | 5,3 |
| 0,2 | 3 |
| 0,2 | 3 |
| 0,3 | 1,5 |
| 0,3 | 1,2 |
| 0,3 | 3,5 |
| 0,3 | 3 |
| 0,3 | 5,2 |
| 0,8 | 6 |
| 2 | 1,5 |
| $\Sigma = 19$ buah akar | |

| AKAR BAMBU GUNUNGPATI | |
|---------------------------------|--------------|
| PAKET III | |
| Berat tanah+akar bambu = 719 gr | |
| Berat akar bambu = 100 mg | |
| Diameter (mm) | Panjang (cm) |
| 0,1 | 2,2 |
| 0,1 | 2,2 |
| 0,1 | 3,4 |
| 0,2 | 3,2 |
| 0,2 | 1,8 |
| 0,2 | 2,4 |
| 0,2 | 2,3 |
| 0,2 | 3 |
| 0,3 | 1,2 |
| 0,3 | 3,6 |
| 0,3 | 2,2 |
| 0,3 | 3,6 |
| 0,4 | 4,2 |
| 0,5 | 2,7 |
| 0,7 | 3,5 |
| 0,8 | 5,8 |
| $\Sigma = 15$ buah akar | |

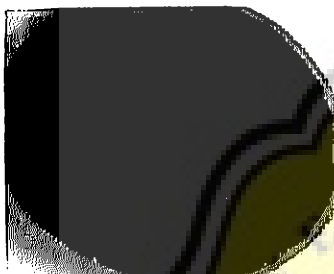
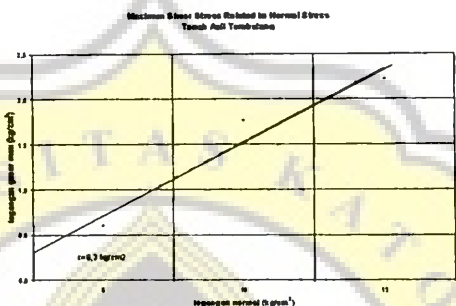
Kuat Geser Tanah (Shear Strength) Asli Gunungpati

| | | C (kg/cm ²) | φ (°) |
|---|---|----------------------------|-------|
|  | <p>Maximum Shear Stress Related to Normal Stress Tanah Asli Gunungpati</p>  | 0,68 | 12 |
| | | | |


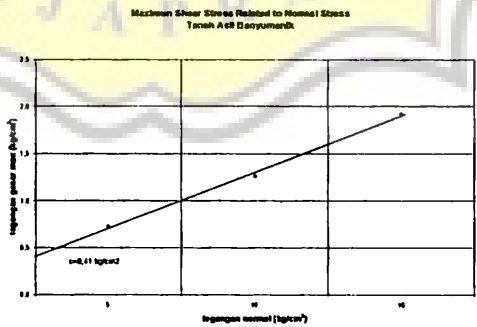
Kuat Geser Tanah (Shear Strength) Asli Mijen

| | | C (kg/cm ²) | φ (°) |
|---|--|----------------------------|-------|
|  | <p>Maximum Shear Stress Related to Normal Stress Tanah Asli Mijen</p>  | 0,72 | 20 |
| | | | |

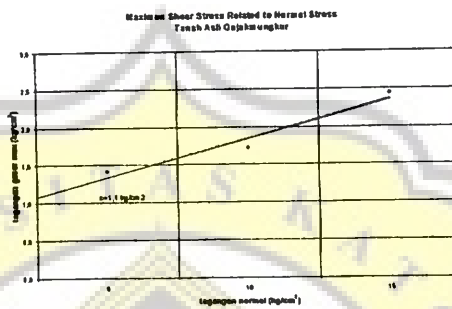
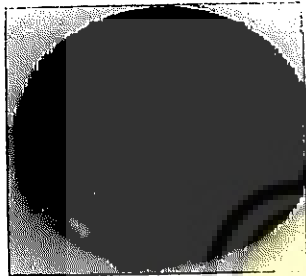
Kuat Geser Tanah (Shear Strength) Asli Tembalang

| |  |  | |
|--|---|--|-------|
| | | C (kg/cm ²) | φ (°) |
| | | 0,32 | 21 |

Kuat Geser Tanah (Shear Strength) Asli Banyumanik

| |  |  | |
|--|---|--|-------|
| | | C (kg/cm ²) | φ (°) |
| | | 0,41 | 14 |

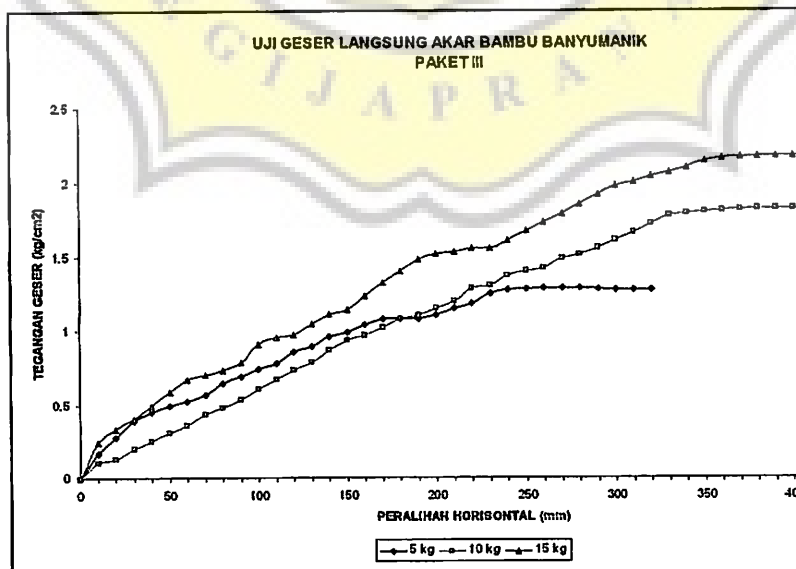
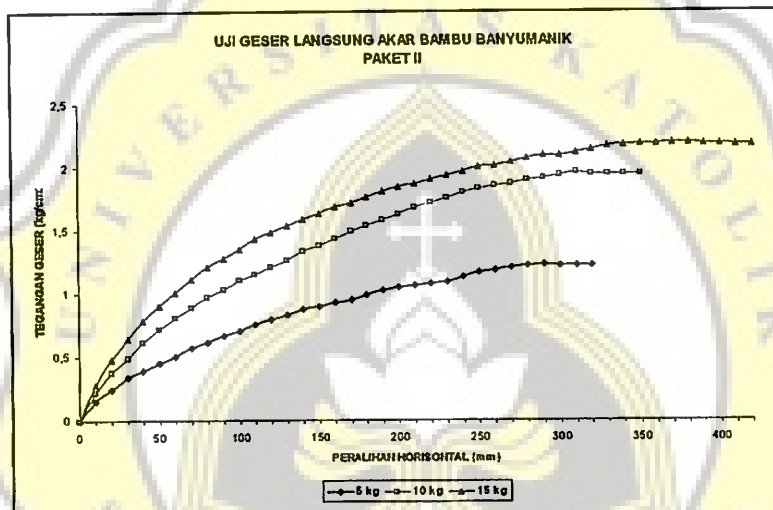
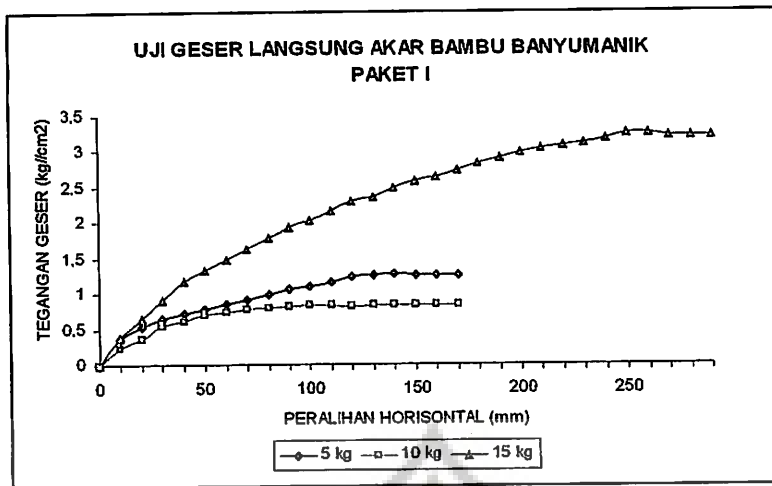
Kuat Geser Tanah (Shear Strength) Asli Gajahmungkur

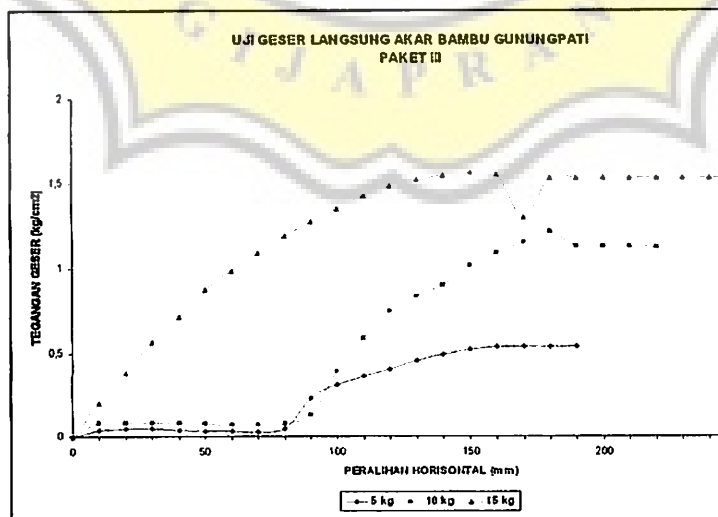
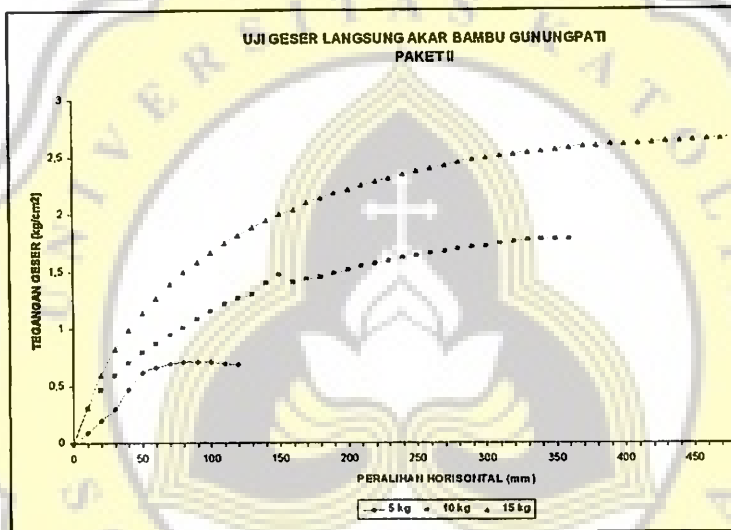
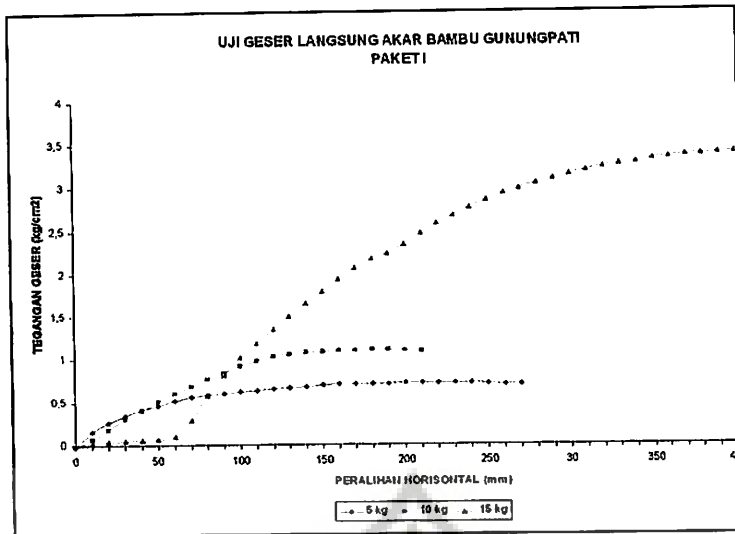


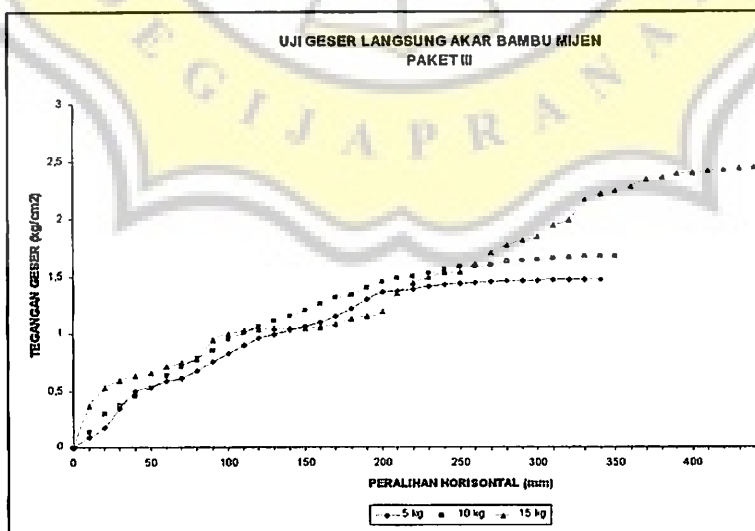
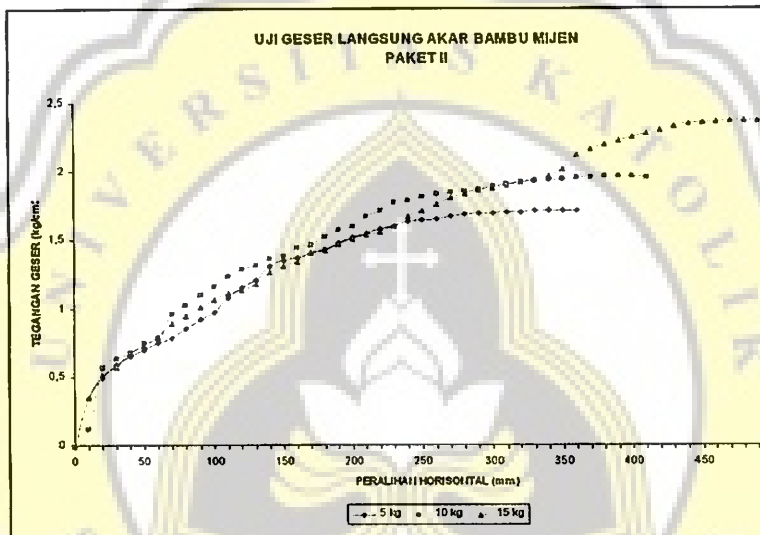
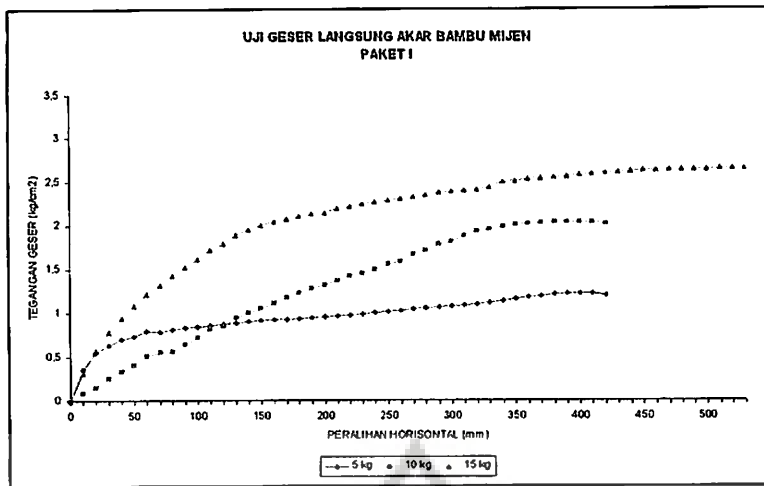
| C (kg/cm ²) | ϕ (°) |
|----------------------------|------------|
| 1,1 | 14 |

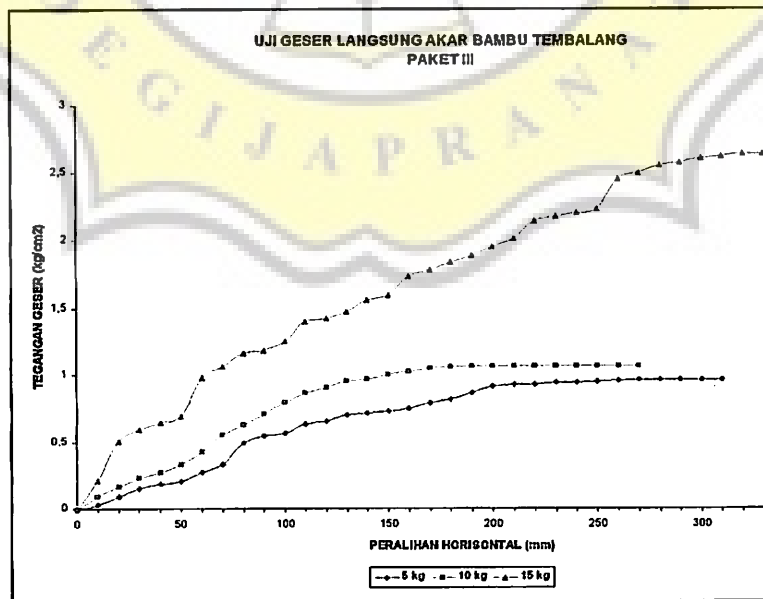
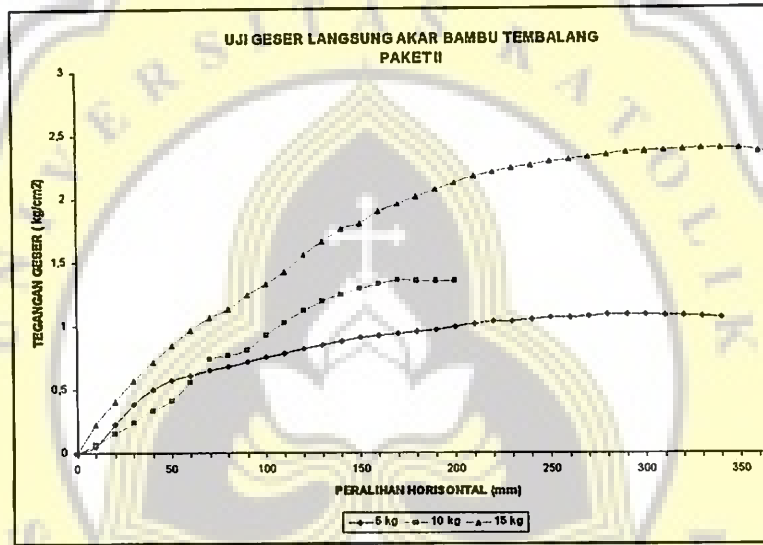
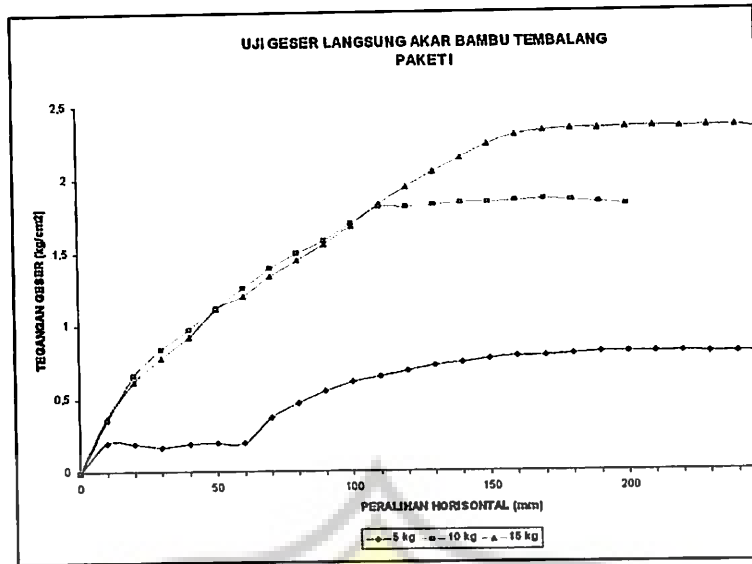
The logo of Universitas Katolik Soegijapranata is a yellow shield with a scalloped border. Inside the shield, there is a central emblem featuring a cross above an open book, flanked by two stylized figures. The text "UNIVERSITAS KATOLIK" is written along the top inner edge, and "SOEGIJAPRANATA" is written along the bottom inner edge.

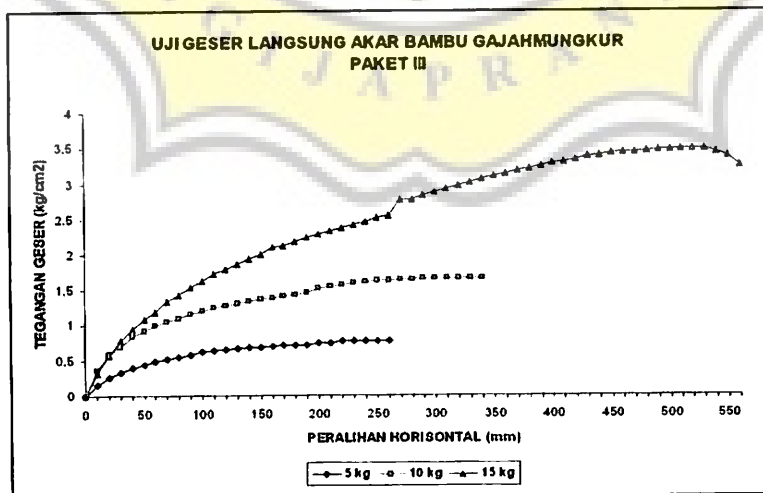
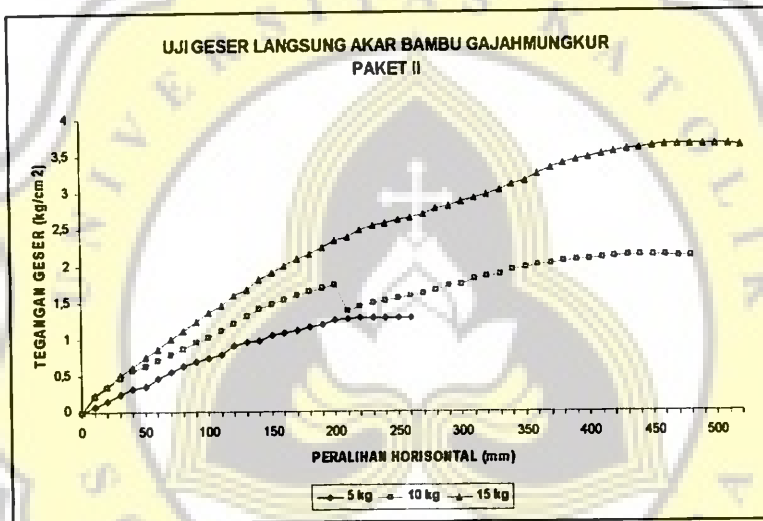
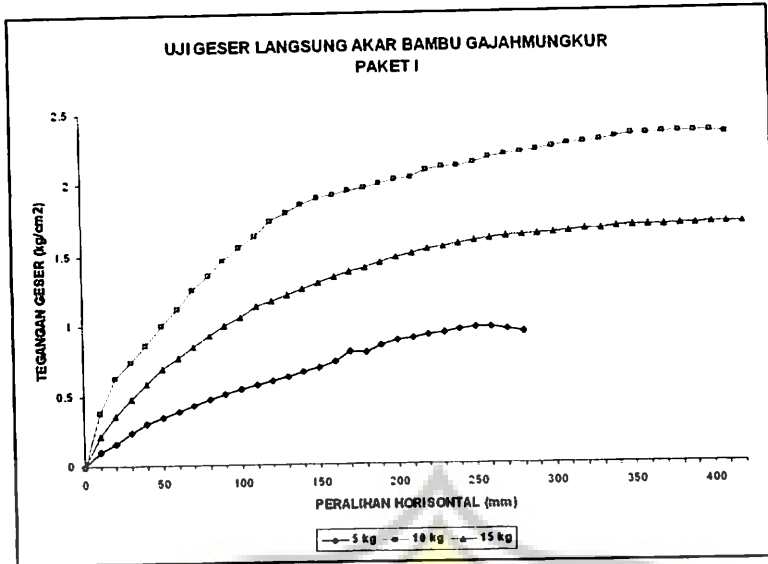
LAMPIRAN II
KUAT GESER (SHEAR STRENGTH)
AKAR BAMBU

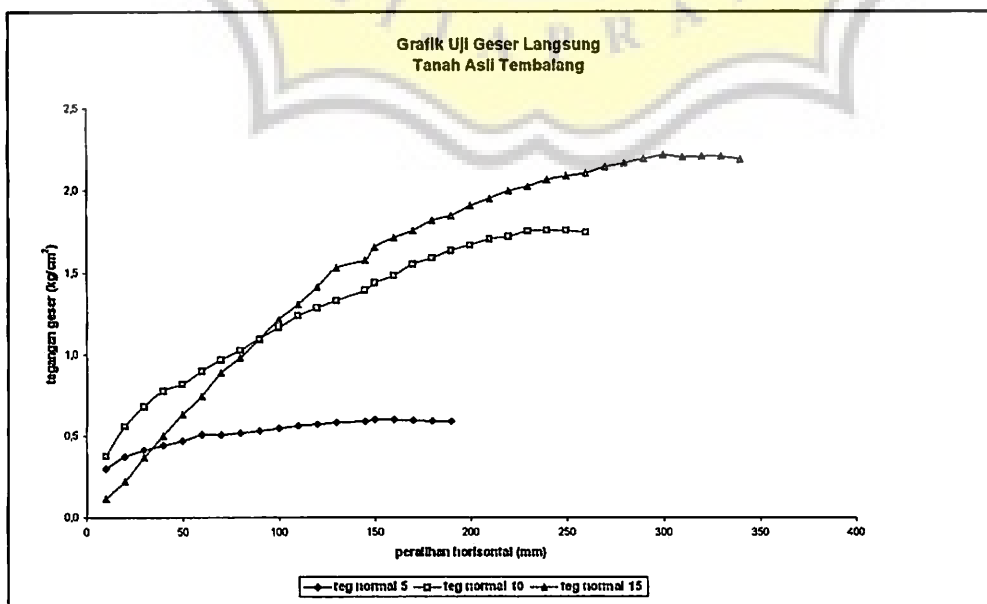
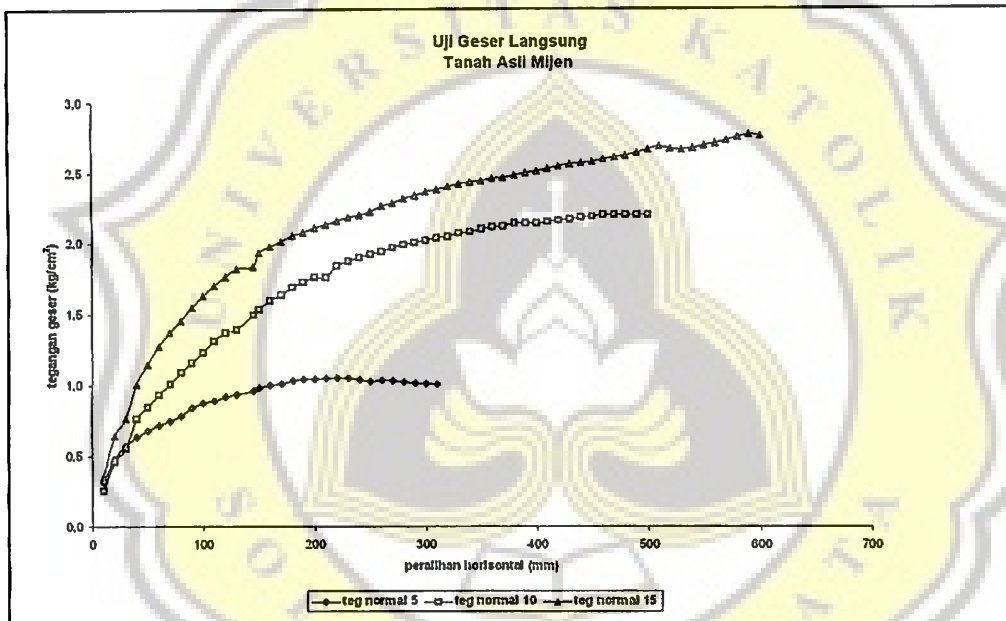
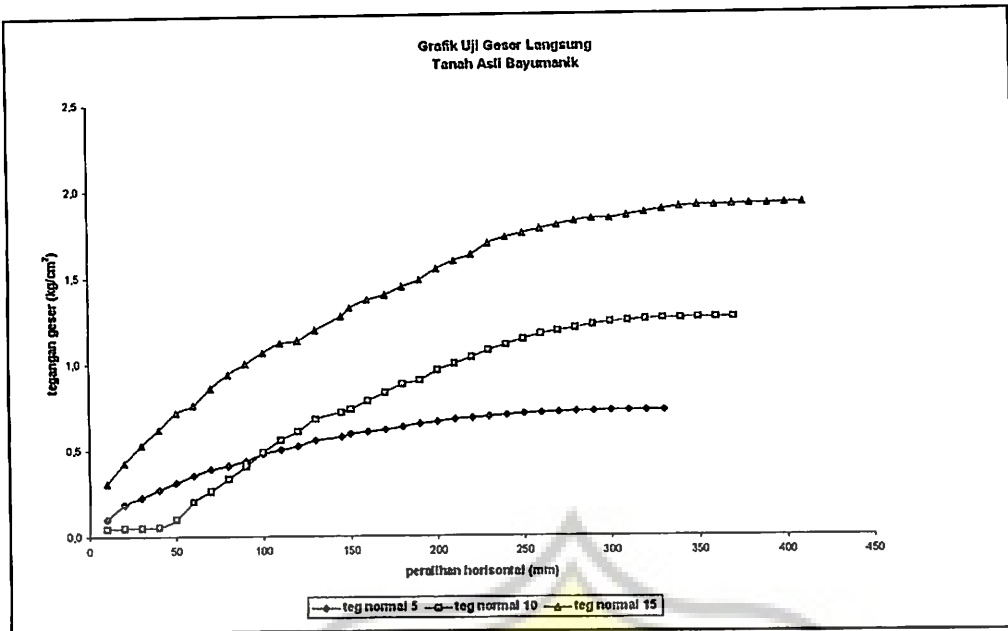


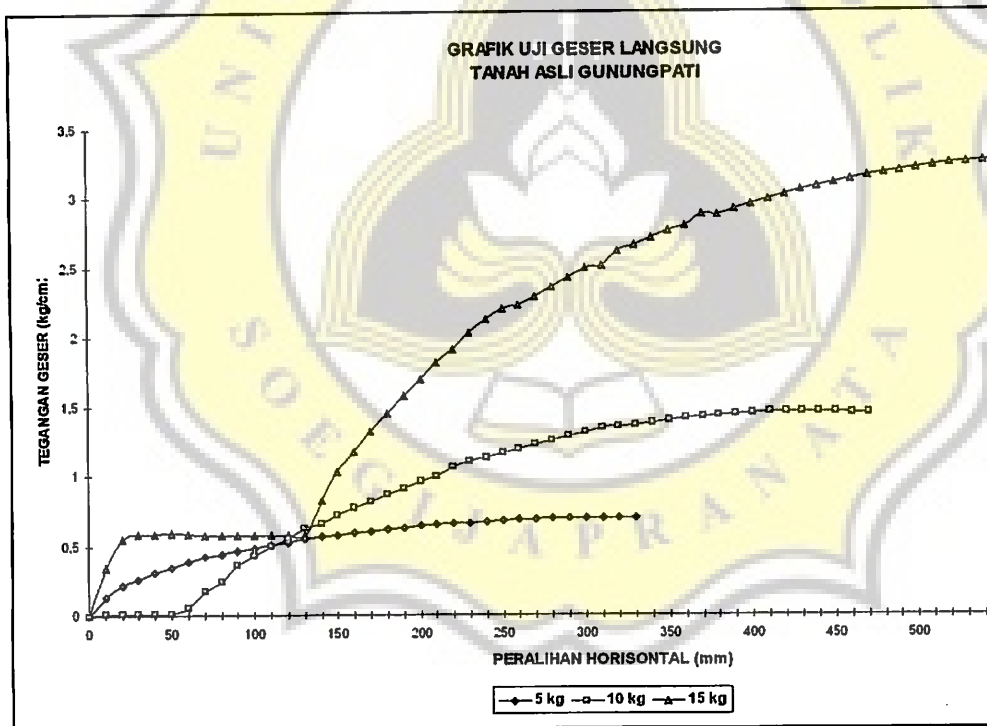
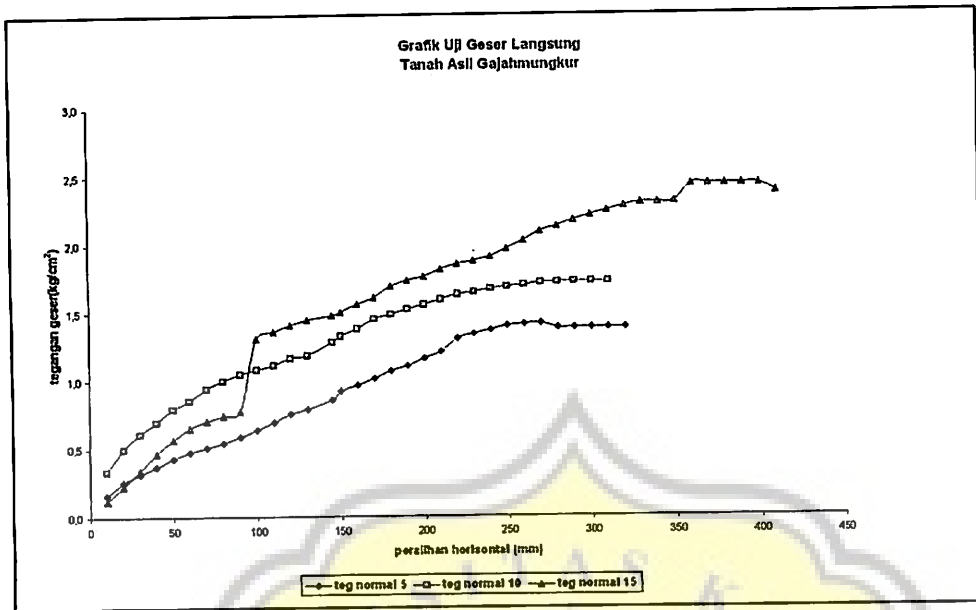












UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 212,9 gr Tanggal = 05 Agustus 2006
 Tnh.Basah+Cawan = 101,7 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 76,6 gr Teg. Normal = 5 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 94 | 10,434 | 0,382 |
| 20 | 135 | 14,985 | 0,548 |
| 30 | 162 | 17,982 | 0,658 |
| 40 | 183 | 20,313 | 0,743 |
| 50 | 197 | 21,867 | 0,800 |
| 60 | 214 | 23,754 | 0,869 |
| 70 | 227 | 25,197 | 0,922 |
| 80 | 248 | 27,528 | 1,007 |
| 90 | 264 | 29,304 | 1,072 |
| 100 | 274 | 30,414 | 1,112 |
| 110 | 288 | 31,968 | 1,169 |
| 120 | 307 | 34,077 | 1,246 |
| 130 | 310 | 34,410 | 1,259 |
| 145 | 316 | 35,076 | 1,283 |
| 150 | 314 | 34,854 | 1,275 |
| 160 | 314 | 34,854 | 1,275 |
| 170 | 314 | 34,854 | 1,275 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 224,3 gr Tanggal = 07 Agustus 2006
 Tnh.Basah+Cawan = 99,7 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 76,9 gr Teg. Normal = 10 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 61 | 6,771 | 0,248 |
| 20 | 93 | 10,323 | 0,378 |
| 30 | 138 | 15,318 | 0,560 |
| 40 | 154 | 17,094 | 0,625 |
| 50 | 177 | 19,647 | 0,719 |
| 60 | 185 | 20,535 | 0,751 |
| 70 | 194 | 21,534 | 0,788 |
| 80 | 199 | 22,089 | 0,808 |
| 90 | 206 | 22,866 | 0,836 |
| 100 | 209 | 23,199 | 0,849 |
| 110 | 210 | 23,310 | 0,853 |
| 120 | 207 | 22,977 | 0,840 |
| 130 | 208 | 23,088 | 0,844 |
| 145 | 208 | 23,088 | 0,844 |
| 150 | 210 | 23,310 | 0,853 |
| 160 | 208 | 23,088 | 0,844 |
| 170 | 208 | 23,088 | 0,844 |
| 180 | 208 | 23,088 | 0,844 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 228,5 gr Tanggal = 08 Agustus 2006
 Tnh.Basah+Cawan = 100,6 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 82,8 gr Teg. Normal = 15 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 96 | 10,656 | 0,390 |
| 20 | 165 | 18,315 | 0,670 |
| 30 | 229 | 25,419 | 0,930 |
| 40 | 294 | 32,634 | 1,194 |
| 50 | 329 | 36,519 | 1,336 |
| 60 | 368 | 40,848 | 1,494 |
| 70 | 405 | 44,955 | 1,644 |
| 80 | 441 | 48,951 | 1,790 |
| 90 | 482 | 53,502 | 1,957 |
| 100 | 504 | 55,944 | 2,046 |
| 110 | 538 | 59,718 | 2,184 |
| 120 | 569 | 63,159 | 2,310 |
| 130 | 582 | 64,602 | 2,363 |
| 145 | 615 | 68,265 | 2,497 |
| 150 | 638 | 70,818 | 2,590 |
| 160 | 654 | 72,594 | 2,655 |
| 170 | 676 | 75,036 | 2,745 |
| 180 | 698 | 77,478 | 2,834 |
| 190 | 718 | 79,698 | 2,915 |
| 200 | 737 | 81,807 | 2,992 |
| 210 | 750 | 83,250 | 3,045 |
| 220 | 759 | 84,249 | 3,082 |
| 230 | 771 | 85,581 | 3,130 |
| 240 | 783 | 86,913 | 3,179 |
| 250 | 800 | 88,800 | 3,248 |
| 260 | 800 | 88,800 | 3,248 |
| 270 | 791 | 87,801 | 3,211 |
| 280 | 791 | 87,801 | 3,211 |
| 290 | 790 | 87,690 | 3,207 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 215,4 gr Tanggal = 13 Agustus 2006
 Tnh.Basah+Cawan = 101,6 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 78,9 gr Teg. Normal = 5 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 43 | 4,773 | 0,175 |
| 20 | 70 | 7,770 | 0,284 |
| 30 | 98 | 10,878 | 0,398 |
| 40 | 113 | 12,543 | 0,459 |
| 50 | 124 | 13,764 | 0,503 |
| 60 | 132 | 14,652 | 0,536 |
| 70 | 142 | 15,762 | 0,577 |
| 80 | 162 | 17,982 | 0,658 |
| 90 | 172 | 19,092 | 0,698 |
| 100 | 185 | 20,535 | 0,751 |
| 110 | 194 | 21,534 | 0,788 |
| 120 | 214 | 23,754 | 0,869 |
| 130 | 223 | 24,753 | 0,905 |
| 145 | 239 | 26,529 | 0,970 |
| 150 | 246 | 27,306 | 0,999 |
| 160 | 258 | 28,638 | 1,047 |
| 170 | 267 | 29,637 | 1,084 |
| 180 | 268 | 29,748 | 1,088 |
| 190 | 268 | 29,748 | 1,088 |
| 200 | 274 | 30,414 | 1,112 |
| 210 | 285 | 31,835 | 1,157 |
| 220 | 293 | 32,523 | 1,190 |
| 230 | 308 | 34,188 | 1,250 |
| 240 | 315 | 34,965 | 1,279 |
| 250 | 316 | 35,076 | 1,283 |
| 260 | 318 | 35,298 | 1,291 |
| 270 | 318 | 35,298 | 1,291 |
| 280 | 318 | 35,298 | 1,291 |
| 290 | 317 | 35,187 | 1,287 |
| 290 | 317 | 35,187 | 1,287 |
| 300 | 315 | 34,965 | 1,279 |
| 310 | 315 | 34,965 | 1,279 |
| 320 | 315 | 34,965 | 1,279 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 221,3 gr Tanggal = 12 Agustus 2006
 Tnh.Basah+Cawan = 111,8 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 82,7 gr Teg. Normal = 10 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 27 | 2,997 | 0,110 |
| 20 | 34 | 3,774 | 0,138 |
| 30 | 51 | 5,661 | 0,207 |
| 40 | 64 | 7,104 | 0,260 |
| 50 | 78 | 8,658 | 0,317 |
| 60 | 91 | 10,101 | 0,369 |
| 70 | 109 | 12,099 | 0,443 |
| 80 | 121 | 13,431 | 0,491 |
| 90 | 134 | 14,874 | 0,544 |
| 100 | 152 | 16,872 | 0,617 |
| 110 | 167 | 18,537 | 0,678 |
| 120 | 183 | 20,313 | 0,743 |
| 130 | 197 | 21,867 | 0,800 |
| 145 | 217 | 24,087 | 0,881 |
| 150 | 232 | 25,752 | 0,942 |
| 160 | 241 | 26,751 | 0,978 |
| 170 | 254 | 28,194 | 1,031 |
| 180 | 267 | 29,637 | 1,084 |
| 190 | 274 | 30,414 | 1,112 |
| 200 | 285 | 31,635 | 1,157 |
| 210 | 296 | 32,856 | 1,202 |
| 220 | 318 | 35,298 | 1,291 |
| 230 | 323 | 35,853 | 1,311 |
| 240 | 339 | 37,629 | 1,376 |
| 250 | 346 | 38,406 | 1,405 |
| 260 | 352 | 39,072 | 1,429 |
| 270 | 368 | 40,848 | 1,494 |
| 280 | 374 | 41,514 | 1,518 |
| 290 | 385 | 42,735 | 1,563 |
| 290 | 385 | 42,735 | 1,563 |
| 300 | 398 | 44,178 | 1,616 |
| 310 | 410 | 45,510 | 1,665 |
| 320 | 425 | 47,175 | 1,726 |
| 330 | 439 | 48,729 | 1,782 |
| 340 | 442 | 49,062 | 1,795 |
| 350 | 445 | 49,395 | 1,807 |
| 360 | 446 | 49,506 | 1,811 |
| 370 | 448 | 49,728 | 1,819 |
| 380 | 449 | 49,839 | 1,823 |
| 390 | 450 | 49,950 | 1,827 |
| 400 | 450 | 49,950 | 1,827 |
| 410 | 451 | 50,061 | 1,831 |
| 420 | 452 | 50,172 | 1,835 |
| 430 | 452 | 50,172 | 1,835 |
| 440 | 452 | 50,172 | 1,835 |

UJI GESER LANGSUNG AKAR BAMBUI BANYUMANIK

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 228,4 gr

Tanggal = 13 Agustus 2006

Tnh.Basah+Cawan = 115,7 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 82,8 gr

Teg. Normal = 15 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 62 | 6,882 | 0,252 |
| 20 | 84 | 9,324 | 0,341 |
| 30 | 102 | 11,322 | 0,414 |
| 40 | 124 | 13,764 | 0,503 |
| 50 | 148 | 16,428 | 0,601 |
| 60 | 167 | 18,537 | 0,678 |
| 70 | 175 | 19,425 | 0,711 |
| 80 | 183 | 20,313 | 0,743 |
| 90 | 196 | 21,756 | 0,796 |
| 100 | 227 | 25,197 | 0,922 |
| 110 | 238 | 26,418 | 0,966 |
| 120 | 242 | 26,862 | 0,983 |
| 130 | 259 | 28,749 | 1,052 |
| 145 | 275 | 30,525 | 1,117 |
| 150 | 284 | 31,524 | 1,153 |
| 160 | 305 | 33,855 | 1,238 |
| 170 | 327 | 36,297 | 1,328 |
| 180 | 347 | 38,517 | 1,409 |
| 190 | 366 | 40,626 | 1,486 |
| 200 | 375 | 41,625 | 1,523 |
| 210 | 379 | 42,069 | 1,539 |
| 220 | 384 | 42,624 | 1,559 |
| 230 | 384 | 42,624 | 1,559 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 228,6 gr Tanggal = 09 Agustus 2006
 Tnh.Basah+Cawan = 104,9 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 79,8 gr Teg. Normal = 5 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 38 | 4,218 | 0,154 |
| 20 | 60 | 6,660 | 0,244 |
| 30 | 84 | 9,324 | 0,341 |
| 40 | 98 | 10,878 | 0,398 |
| 50 | 113 | 12,543 | 0,459 |
| 60 | 125 | 13,875 | 0,508 |
| 70 | 141 | 15,651 | 0,572 |
| 80 | 152 | 16,872 | 0,617 |
| 90 | 166 | 18,315 | 0,670 |
| 100 | 175 | 19,425 | 0,711 |
| 110 | 187 | 20,757 | 0,759 |
| 120 | 197 | 21,867 | 0,800 |
| 130 | 205 | 22,755 | 0,832 |
| 145 | 217 | 24,087 | 0,881 |
| 150 | 222 | 24,642 | 0,901 |
| 160 | 229 | 25,419 | 0,930 |
| 170 | 236 | 26,196 | 0,958 |
| 180 | 245 | 27,195 | 0,995 |
| 190 | 254 | 28,194 | 1,031 |
| 200 | 259 | 28,749 | 1,052 |
| 210 | 262 | 29,082 | 1,064 |
| 220 | 267 | 29,637 | 1,084 |
| 230 | 271 | 30,081 | 1,100 |
| 240 | 280 | 31,080 | 1,137 |
| 250 | 288 | 31,968 | 1,169 |
| 260 | 292 | 32,412 | 1,186 |
| 270 | 298 | 33,078 | 1,210 |
| 280 | 302 | 33,522 | 1,226 |
| 290 | 304 | 33,744 | 1,234 |
| 290 | 304 | 33,744 | 1,234 |
| 300 | 302 | 33,522 | 1,226 |
| 310 | 302 | 33,522 | 1,226 |
| 320 | 302 | 33,522 | 1,226 |

UJI GESER LANGSUNG AKAR BAMBU BANYUMANIK

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 224,9 gr Tanggal = 10 Agustus 2006
 Tnh.Basah+Cawan = 102,3 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 78,5gr Teg. Normal = 10 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 55 | 6,105 | 0,223 |
| 20 | 94 | 10,434 | 0,382 |
| 30 | 122 | 13,542 | 0,495 |
| 40 | 152 | 16,872 | 0,617 |
| 50 | 178 | 19,758 | 0,723 |
| 60 | 200 | 22,200 | 0,812 |
| 70 | 221 | 24,531 | 0,897 |
| 80 | 240 | 26,640 | 0,974 |
| 90 | 256 | 28,416 | 1,039 |
| 100 | 273 | 30,303 | 1,108 |
| 110 | 284 | 31,524 | 1,153 |
| 120 | 300 | 33,300 | 1,218 |
| 130 | 312 | 34,632 | 1,267 |
| 145 | 330 | 36,630 | 1,340 |
| 150 | 342 | 37,962 | 1,389 |
| 160 | 354 | 39,294 | 1,437 |
| 170 | 369 | 40,959 | 1,498 |
| 180 | 381 | 42,291 | 1,547 |
| 190 | 392 | 43,512 | 1,592 |
| 200 | 403 | 44,733 | 1,636 |
| 210 | 415 | 46,065 | 1,685 |
| 220 | 424 | 47,064 | 1,721 |
| 230 | 434 | 48,174 | 1,762 |
| 240 | 444 | 49,284 | 1,803 |
| 250 | 452 | 50,172 | 1,835 |
| 260 | 457 | 50,727 | 1,855 |
| 270 | 461 | 51,171 | 1,872 |
| 280 | 468 | 51,948 | 1,900 |
| 290 | 472 | 52,392 | 1,916 |
| 290 | 472 | 52,392 | 1,916 |
| 300 | 478 | 53,058 | 1,941 |
| 310 | 484 | 53,724 | 1,965 |
| 320 | 480 | 53,280 | 1,949 |
| 330 | 480 | 53,280 | 1,949 |
| 340 | 479 | 53,169 | 1,945 |
| 350 | 479 | 53,169 | 1,945 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,9 gr Operator = Sisca+Agung
 Tanah+Ring = 213,4 gr Tanggal = 17 Mei 2006
 Tnh.Basah+Cawan = 99,4 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 74,7 gr Teg. Normal = 5 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 44 | 4,884 | 0,178641316 |
| 20 | 68 | 7,548 | 0,276082035 |
| 30 | 89 | 9,879 | 0,361342663 |
| 40 | 105 | 11,655 | 0,428303142 |
| 50 | 117 | 12,987 | 0,475023501 |
| 60 | 130 | 14,43 | 0,52780389 |
| 70 | 140 | 15,54 | 0,568404189 |
| 80 | 147 | 16,317 | 0,596824398 |
| 90 | 152 | 16,872 | 0,617124548 |
| 100 | 156 | 17,316 | 0,633364667 |
| 110 | 160 | 17,78 | 0,649604787 |
| 120 | 164 | 18,204 | 0,665844907 |
| 130 | 167 | 18,537 | 0,678024997 |
| 145 | 170 | 18,87 | 0,690205086 |
| 150 | 174 | 19,314 | 0,706445206 |
| 160 | 176 | 19,536 | 0,714565266 |
| 170 | 176 | 19,536 | 0,714565266 |
| 180 | 176 | 19,536 | 0,714565266 |
| 190 | 176,5 | 19,5915 | 0,716595281 |
| 200 | 178 | 19,758 | 0,722685326 |
| 210 | 178 | 19,758 | 0,722685326 |
| 220 | 179 | 19,869 | 0,728745356 |
| 230 | 180 | 19,98 | 0,730805386 |
| 240 | 178 | 19,758 | 0,722685326 |
| 250 | 177 | 19,647 | 0,718625296 |
| 260 | 174 | 19,314 | 0,706445206 |
| 270 | 174 | 19,314 | 0,706445206 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 214,1 gr Tanggal = 18 Mei 2006
 Tnh.Basah+Cawan = 91,3 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 65,3 gr Teg. Normal = 10 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 19 | 2,109 | 0,07714057 |
| 20 | 47 | 5,217 | 0,19082141 |
| 30 | 77 | 8,547 | 0,3126223 |
| 40 | 104 | 11,544 | 0,42224311 |
| 50 | 128 | 14,208 | 0,51968383 |
| 60 | 152 | 16,872 | 0,61712455 |
| 70 | 172 | 19,092 | 0,69832515 |
| 80 | 192 | 21,312 | 0,77952574 |
| 90 | 210 | 23,31 | 0,85260628 |
| 100 | 229 | 25,419 | 0,92974685 |
| 110 | 245 | 27,195 | 0,99470733 |
| 120 | 257 | 28,527 | 1,04342769 |
| 130 | 262 | 29,082 | 1,06372784 |
| 140 | 266 | 29,526 | 1,07996798 |
| 150 | 270 | 29,97 | 1,09620808 |
| 160 | 272 | 30,192 | 1,10432814 |
| 170 | 273 | 30,303 | 1,10838817 |
| 180 | 274 | 30,414 | 1,1124482 |
| 190 | 274 | 30,414 | 1,1124482 |
| 200 | 271 | 30,081 | 1,10026811 |
| 210 | 270 | 29,97 | 1,09620808 |



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UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 214,1 gr

Tanggal = 18 Mei 2006

Tnh.Basah+Cawan = 95,4 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 69,6 gr

Teg. Normal = **15 kg/cm²**

PAKET I

| Peralihan Horisontal (mm) | Load Dial Reading (div) | Beban Horisontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------------|-------------------------------|-----------------------------|--|
| 10 | 11 | 1,221 | 0,044660329 |
| 20 | 13 | 1,443 | 0,052780389 |
| 30 | 15 | 1,665 | 0,060900449 |
| 40 | 18 | 1,998 | 0,073080539 |
| 50 | 21 | 2,331 | 0,085260628 |
| 60 | 28 | 3,108 | 0,113680838 |
| 70 | 75 | 8,325 | 0,304502244 |
| 80 | 147 | 16,317 | 0,596824398 |
| 90 | 205 | 22,755 | 0,832306134 |
| 100 | 255 | 28,305 | 1,03530763 |
| 110 | 294 | 32,634 | 1,193648796 |
| 120 | 335 | 37,185 | 1,360110023 |
| 130 | 373 | 41,403 | 1,51439116 |
| 140 | 411 | 45,621 | 1,668672297 |
| 150 | 444 | 49,284 | 1,802653284 |
| 160 | 480 | 53,28 | 1,948814362 |
| 170 | 512 | 56,832 | 2,078735319 |
| 180 | 537 | 59,607 | 2,180236067 |
| 190 | 552 | 61,272 | 2,241136516 |
| 200 | 577 | 64,047 | 2,342637264 |
| 210 | 610 | 67,71 | 2,476618251 |
| 220 | 637 | 70,707 | 2,586239059 |
| 230 | 661 | 73,371 | 2,683679777 |
| 240 | 684 | 75,924 | 2,777060465 |
| 250 | 704 | 78,144 | 2,858261064 |
| 260 | 723 | 80,253 | 2,935401632 |
| 270 | 737 | 81,807 | 2,992242051 |
| 280 | 750 | 83,25 | 3,04502244 |
| 290 | 763 | 84,693 | 3,097802829 |
| 300 | 777 | 86,247 | 3,154643248 |
| 310 | 785 | 87,135 | 3,187123487 |
| 320 | 795 | 88,245 | 3,227723786 |
| 330 | 803 | 89,133 | 3,260204026 |
| 340 | 810 | 89,91 | 3,288624235 |
| 350 | 818 | 90,798 | 3,321104474 |
| 360 | 824 | 91,464 | 3,345464654 |
| 370 | 828 | 91,908 | 3,361704774 |
| 380 | 832 | 92,352 | 3,377944893 |
| 390 | 835 | 92,685 | 3,390124983 |
| 400 | 836 | 92,796 | 3,394185013 |
| 410 | 836 | 92,796 | 3,394185013 |
| 420 | 836 | 92,796 | 3,394185013 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 215,8 gr Tanggal = 9 Mei 2006
 Tnh.Basah+Cawan = 102,8 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 74,2 gr Teg. Normal = 5 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 25 | 2,775 | 0,101500748 |
| 20 | 51 | 5,661 | 0,207061526 |
| 30 | 76 | 8,436 | 0,308562274 |
| 40 | 117 | 12,987 | 0,475023501 |
| 50 | 154 | 17,094 | 0,625244608 |
| 60 | 165 | 18,315 | 0,669904937 |
| 70 | 172 | 19,092 | 0,698325146 |
| 80 | 175,5 | 19,4805 | 0,712535251 |
| 90 | 176 | 19,536 | 0,714565266 |
| 100 | 176 | 19,536 | 0,714565266 |
| 110 | 172,5 | 19,1475 | 0,700355161 |
| 120 | 170 | 18,87 | 0,690205086 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 230,8 gr Tanggal = 15 Mei 2006
 Tnh.Basah+Cawan = 106,9 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 69,7gr Teg. Normal = 10 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 77 | 8,547 | 0,312622304 |
| 20 | 118 | 13,098 | 0,479083531 |
| 30 | 147 | 16,317 | 0,596824398 |
| 40 | 173 | 19,203 | 0,702385176 |
| 50 | 197 | 21,867 | 0,799825894 |
| 60 | 215 | 23,865 | 0,872806433 |
| 70 | 235 | 26,085 | 0,954107031 |
| 80 | 250 | 27,75 | 1,01500748 |
| 90 | 269 | 29,859 | 1,092148048 |
| 100 | 285 | 31,635 | 1,157108527 |
| 110 | 301 | 33,411 | 1,222069006 |
| 120 | 313 | 34,743 | 1,270789365 |
| 130 | 322 | 35,742 | 1,307329634 |
| 145 | 345 | 38,295 | 1,400710322 |
| 150 | 364 | 40,404 | 1,477850891 |
| 160 | 348 | 38,628 | 1,412890412 |
| 170 | 355 | 39,405 | 1,441310622 |
| 180 | 360 | 39,96 | 1,461610771 |
| 190 | 367,5 | 40,7925 | 1,492060996 |
| 200 | 375 | 41,625 | 1,52251122 |
| 210 | 382 | 42,402 | 1,550931429 |
| 220 | 388 | 43,068 | 1,575291609 |
| 230 | 393,5 | 43,6785 | 1,597621773 |
| 240 | 400 | 44,4 | 1,624011968 |
| 250 | 405 | 44,955 | 1,644312118 |
| 260 | 410 | 45,51 | 1,664612267 |
| 270 | 414 | 45,954 | 1,680852387 |
| 280 | 419 | 46,509 | 1,701152536 |
| 290 | 423 | 46,953 | 1,717392656 |
| 300 | 425 | 47,175 | 1,725512716 |
| 310 | 430 | 47,73 | 1,745812866 |
| 320 | 434 | 48,174 | 1,762052985 |
| 330 | 439 | 48,729 | 1,782353135 |
| 340 | 440 | 48,84 | 1,786413165 |
| 350 | 440 | 48,84 | 1,786413165 |
| 360 | 440 | 48,84 | 1,786413165 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,6 gr Operator = Sisca+Agung
 Tanah+Ring = 218,4 gr Tanggal = 19 Mei 2006
 Tnh.Basah+Cawan = 85,2 g Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 63,4 g Teg. Normal = 15 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 80 | 8,88 | 0,324802394 |
| 20 | 150 | 16,65 | 0,609004488 |
| 30 | 204 | 22,644 | 0,828246104 |
| 40 | 245 | 27,195 | 0,99470733 |
| 50 | 281 | 31,191 | 1,140868407 |
| 60 | 313 | 34,743 | 1,270789365 |
| 70 | 344 | 38,184 | 1,396650292 |
| 80 | 370 | 41,07 | 1,50221107 |
| 90 | 392 | 43,512 | 1,591531729 |
| 100 | 412 | 45,732 | 1,672732327 |
| 110 | 433 | 48,063 | 1,757992955 |
| 120 | 450 | 49,95 | 1,827013464 |
| 130 | 466 | 51,726 | 1,891973943 |
| 140 | 482 | 53,502 | 1,956934421 |
| 150 | 495 | 54,945 | 2,00971481 |
| 160 | 504 | 55,944 | 2,04625508 |
| 170 | 520 | 57,72 | 2,111215558 |
| 180 | 530 | 58,83 | 2,151815858 |
| 190 | 540 | 59,94 | 2,192416157 |
| 200 | 548 | 60,828 | 2,224896396 |
| 210 | 557 | 61,827 | 2,261436665 |
| 220 | 565 | 62,715 | 2,293916905 |
| 230 | 573 | 63,603 | 2,326397144 |
| 240 | 581 | 64,491 | 2,358877383 |
| 250 | 587 | 65,157 | 2,383237563 |
| 260 | 593 | 65,823 | 2,407597742 |
| 270 | 600 | 66,6 | 2,436017952 |
| 280 | 606 | 67,266 | 2,460378131 |
| 290 | 612 | 67,932 | 2,484738311 |
| 300 | 616 | 68,376 | 2,500978431 |
| 310 | 620 | 68,82 | 2,51721855 |
| 320 | 623 | 69,153 | 2,52939864 |
| 330 | 627 | 69,597 | 2,54563876 |
| 340 | 630 | 69,93 | 2,55781885 |
| 350 | 633 | 70,263 | 2,569998939 |
| 360 | 637 | 70,707 | 2,586239059 |
| 370 | 640 | 71,04 | 2,598419149 |
| 380 | 640,5 | 71,0955 | 2,600449164 |
| 390 | 644 | 71,484 | 2,614659268 |
| 400 | 645 | 71,595 | 2,618719298 |
| 410 | 647 | 71,817 | 2,626839358 |
| 420 | 648 | 71,928 | 2,630899388 |
| 430 | 650 | 72,15 | 2,639019448 |
| 440 | 652 | 72,372 | 2,647139508 |
| 450 | 654 | 72,594 | 2,655259568 |
| 460 | 655 | 72,705 | 2,659319598 |
| 470 | 656 | 72,816 | 2,663379627 |
| 480 | 657 | 72,927 | 2,667439657 |
| 490 | 658 | 73,038 | 2,671499687 |
| 500 | 659 | 73,149 | 2,675559717 |
| 510 | 700 | 77,7 | 2,842020944 |
| 520 | 700 | 77,7 | 2,842020944 |
| 530 | 700 | 77,7 | 2,842020944 |
| 540 | 658 | 73,038 | 2,671499687 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,6 gr Operator = Sisca+Agung
 Tanah+Ring = 215,6 gr Tanggal = 21 Mei 2006
 Tnh.Basah+Cawan = 103,2 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 83,4 gr Teg. Normal = 5 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 10 | 1,11 | 0,040600299 |
| 20 | 12 | 1,332 | 0,048720359 |
| 30 | 12 | 1,332 | 0,048720359 |
| 40 | 10 | 1,11 | 0,040600299 |
| 50 | 9 | 0,999 | 0,036540269 |
| 60 | 9 | 0,999 | 0,036540269 |
| 70 | 7 | 0,777 | 0,028420209 |
| 80 | 12 | 1,332 | 0,048720359 |
| 90 | 58 | 6,438 | 0,235481735 |
| 100 | 78 | 8,658 | 0,316682334 |
| 110 | 90 | 9,99 | 0,365402693 |
| 120 | 100 | 11,1 | 0,406002992 |
| 130 | 113 | 12,543 | 0,458783381 |
| 140 | 121 | 13,431 | 0,49126362 |
| 150 | 129 | 14,319 | 0,52374386 |
| 160 | 133 | 14,763 | 0,539983979 |
| 170 | 133 | 14,763 | 0,539983979 |
| 180 | 133 | 14,763 | 0,539983979 |
| 190 | 133 | 14,763 | 0,539983979 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,9 gr Operator = Sisca+Agung
 Tanah+Ring = 216,6 gr Tanggal = 18 Mei 2006
 Tnh.Basah+Cawan = 101,6 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 76,5gr Teg. Normal = 10 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 21 | 2,331 | 0,085260628 |
| 20 | 21 | 2,331 | 0,085260628 |
| 30 | 21 | 2,331 | 0,085260628 |
| 40 | 21 | 2,331 | 0,085260628 |
| 50 | 20 | 2,22 | 0,081200598 |
| 60 | 19 | 2,109 | 0,077140568 |
| 70 | 19 | 2,109 | 0,077140568 |
| 80 | 20 | 2,22 | 0,081200598 |
| 90 | 33 | 3,663 | 0,133980987 |
| 100 | 98 | 10,878 | 0,397882932 |
| 110 | 145 | 16,095 | 0,588704338 |
| 120 | 184 | 20,424 | 0,747045505 |
| 130 | 205 | 22,755 | 0,832306134 |
| 140 | 222 | 24,642 | 0,901326642 |
| 150 | 251 | 27,861 | 1,01906751 |
| 160 | 270 | 29,97 | 1,096208078 |
| 170 | 285 | 31,635 | 1,157108527 |
| 180 | 300 | 33,3 | 1,218008976 |
| 190 | 278,5 | 30,9135 | 1,130718333 |
| 200 | 278 | 30,858 | 1,128688318 |
| 210 | 278 | 30,858 | 1,128688318 |
| 220 | 277 | 30,747 | 1,124628288 |

UJI GESER LANGSUNG AKAR BAMBU GUNUNGPATI

Cawan = 4,6 gr Operator = Sisca+Agung
 Tanah+Ring = 211,8 gr Tanggal = 20 Mei 2006
 Tnh.Basah+Cawan = 97,6 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 67,4gr Teg. Normal = 15 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 50 | 5,55 | 0,203001496 |
| 20 | 95 | 10,545 | 0,385702842 |
| 30 | 140 | 15,54 | 0,568404189 |
| 40 | 177 | 19,647 | 0,718625296 |
| 50 | 215 | 23,865 | 0,872906433 |
| 60 | 243 | 26,973 | 0,986587271 |
| 70 | 270 | 29,97 | 1,096208078 |
| 80 | 295 | 32,745 | 1,197708826 |
| 90 | 315 | 34,965 | 1,278909425 |
| 100 | 334 | 37,074 | 1,356049993 |
| 110 | 352 | 39,072 | 1,429130532 |
| 120 | 367 | 40,737 | 1,490030981 |
| 130 | 376 | 41,736 | 1,52657125 |
| 140 | 382 | 42,402 | 1,550931429 |
| 150 | 386 | 42,846 | 1,567171549 |
| 160 | 383 | 42,513 | 1,554991459 |
| 170 | 321 | 35,631 | 1,303269604 |
| 180 | 379 | 42,069 | 1,53875134 |
| 190 | 379 | 42,069 | 1,53875134 |
| 200 | 379 | 42,069 | 1,53875134 |
| 210 | 378 | 41,958 | 1,53469131 |
| 220 | 378 | 41,958 | 1,53469131 |
| 230 | 378 | 41,958 | 1,53469131 |
| 240 | 378 | 41,958 | 1,53469131 |
| 250 | 378 | 41,958 | 1,53469131 |
| 260 | 378 | 41,958 | 1,53469131 |
| 270 | 378 | 41,958 | 1,53469131 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 223,2 gr Tanggal = 26 Agustus 2006
 Tnh.Basah+Cawan = 93,4 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 67,7 gr Teg. Normal = 5 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 90 | 9,99 | 0,365402693 |
| 20 | 138 | 15,318 | 0,560284129 |
| 30 | 158 | 17,538 | 0,641484727 |
| 40 | 175 | 19,425 | 0,710505236 |
| 50 | 182 | 20,202 | 0,738925445 |
| 60 | 197 | 21,867 | 0,799825894 |
| 70 | 195 | 21,645 | 0,791705834 |
| 80 | 202 | 22,422 | 0,820126044 |
| 90 | 208 | 23,088 | 0,844486223 |
| 100 | 211 | 23,421 | 0,856666313 |
| 110 | 213 | 23,643 | 0,864786373 |
| 120 | 218 | 24,198 | 0,885086523 |
| 130 | 221 | 24,531 | 0,897266612 |
| 145 | 225 | 24,975 | 0,913506732 |
| 150 | 227 | 25,197 | 0,921626792 |
| 160 | 229 | 25,419 | 0,929746852 |
| 170 | 231 | 25,641 | 0,937866911 |
| 180 | 233 | 25,863 | 0,945986971 |
| 190 | 235 | 26,085 | 0,954107031 |
| 200 | 238 | 26,418 | 0,966287121 |
| 210 | 240 | 26,64 | 0,974407181 |
| 220 | 242 | 26,862 | 0,992527241 |
| 230 | 246 | 27,306 | 0,99976736 |
| 240 | 251 | 27,861 | 1,01906751 |
| 250 | 252 | 27,972 | 1,02312754 |
| 260 | 254 | 28,194 | 1,0312476 |
| 270 | 259 | 28,749 | 1,051547749 |
| 280 | 262 | 29,082 | 1,063727839 |
| 290 | 265 | 29,415 | 1,075907929 |
| 300 | 267 | 29,637 | 1,084027989 |
| 310 | 270 | 29,97 | 1,096208078 |
| 320 | 273 | 30,303 | 1,108368168 |
| 330 | 278 | 30,858 | 1,128688318 |
| 340 | 283 | 31,413 | 1,148988467 |
| 350 | 287 | 31,857 | 1,165228587 |
| 360 | 292 | 32,412 | 1,185528737 |
| 370 | 296 | 32,856 | 1,201768856 |
| 380 | 301 | 33,411 | 1,222069006 |
| 390 | 302 | 33,522 | 1,226129036 |
| 400 | 302 | 33,522 | 1,226129036 |
| 410 | 302 | 33,522 | 1,226129036 |
| 420 | 297 | 32,967 | 1,205828886 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 213,5 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan = 97,8 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 72,2 gr Teg. Normal = 10 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 23 | 2,553 | 0,093380688 |
| 20 | 40 | 4,44 | 0,162401197 |
| 30 | 64 | 7,104 | 0,259841915 |
| 40 | 86 | 9,546 | 0,349162573 |
| 50 | 103 | 11,433 | 0,418183082 |
| 60 | 127 | 14,097 | 0,5156238 |
| 70 | 138 | 15,318 | 0,560284129 |
| 80 | 139 | 15,429 | 0,564344159 |
| 90 | 160 | 17,76 | 0,649804787 |
| 100 | 180 | 19,98 | 0,730805386 |
| 110 | 203 | 22,533 | 0,824186074 |
| 120 | 212 | 23,532 | 0,860726343 |
| 130 | 235 | 26,085 | 0,954107031 |
| 145 | 250 | 27,75 | 1,01500748 |
| 150 | 263 | 29,193 | 1,067787869 |
| 160 | 278 | 30,858 | 1,128688318 |
| 170 | 292 | 32,412 | 1,185528737 |
| 180 | 305 | 33,855 | 1,238309126 |
| 190 | 317 | 35,187 | 1,287029485 |
| 200 | 327 | 36,297 | 1,327629784 |
| 210 | 340 | 37,74 | 1,380410173 |
| 220 | 353 | 39,183 | 1,433190562 |
| 230 | 360 | 39,96 | 1,461610771 |
| 240 | 370 | 41,07 | 1,50221107 |
| 250 | 385 | 42,735 | 1,563111519 |
| 260 | 393 | 43,623 | 1,595591759 |
| 270 | 413 | 45,843 | 1,676792357 |
| 280 | 423 | 46,953 | 1,717392656 |
| 290 | 439 | 48,729 | 1,782353135 |
| 300 | 448 | 49,728 | 1,818893404 |
| 310 | 464 | 51,504 | 1,883853883 |
| 320 | 478 | 53,058 | 1,940894302 |
| 330 | 482 | 53,502 | 1,956934421 |
| 340 | 490 | 54,39 | 1,989414661 |
| 350 | 495 | 54,945 | 2,00971481 |
| 360 | 497 | 55,167 | 2,01783487 |
| 370 | 499 | 55,389 | 2,02595493 |
| 380 | 501 | 55,611 | 2,03407499 |
| 390 | 503 | 55,833 | 2,04219505 |
| 400 | 503 | 55,833 | 2,04219505 |
| 410 | 503 | 55,833 | 2,04219505 |
| 420 | 497 | 55,167 | 2,01783487 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 215,8 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan =90,8 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan =67 gr Teg. Normal = 15 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 81 | 8,991 | 0,328862124 |
| 20 | 142 | 15,762 | 0,576524249 |
| 30 | 194 | 21,534 | 0,787645804 |
| 40 | 234 | 25,974 | 0,950047001 |
| 50 | 270 | 29,97 | 1,096208078 |
| 60 | 302 | 33,522 | 1,226129036 |
| 70 | 328 | 36,408 | 1,331689814 |
| 80 | 355 | 39,405 | 1,441310622 |
| 90 | 378 | 41,958 | 1,53469131 |
| 100 | 400 | 44,4 | 1,624011968 |
| 110 | 424 | 47,064 | 1,721452686 |
| 120 | 443 | 49,173 | 1,798593254 |
| 130 | 467 | 51,837 | 1,896033973 |
| 145 | 483 | 53,613 | 1,960994451 |
| 150 | 495 | 54,945 | 2,00971481 |
| 160 | 505 | 56,055 | 2,05031511 |
| 170 | 511 | 56,721 | 2,074675289 |
| 180 | 520 | 57,72 | 2,111215558 |
| 190 | 526 | 58,386 | 2,135575738 |
| 200 | 530 | 58,83 | 2,151815858 |
| 210 | 541 | 60,051 | 2,196476187 |
| 220 | 548 | 60,828 | 2,224896396 |
| 230 | 554 | 61,494 | 2,249256576 |
| 240 | 559 | 62,049 | 2,269556725 |
| 250 | 564 | 62,604 | 2,289856875 |
| 260 | 569 | 63,159 | 2,310157024 |
| 270 | 575 | 63,825 | 2,334517204 |
| 280 | 580 | 64,38 | 2,354817354 |
| 290 | 586 | 65,046 | 2,379177533 |
| 300 | 589 | 65,379 | 2,391357623 |
| 310 | 593 | 65,823 | 2,407597742 |
| 320 | 595 | 66,045 | 2,415717802 |
| 330 | 601 | 66,711 | 2,440077982 |
| 340 | 618 | 68,598 | 2,50909849 |
| 350 | 620 | 68,82 | 2,51721855 |
| 360 | 624 | 69,264 | 2,53345867 |
| 370 | 627 | 69,597 | 2,54563876 |
| 380 | 630 | 69,93 | 2,55781885 |
| 390 | 633 | 70,263 | 2,569988939 |
| 400 | 636 | 70,596 | 2,582179029 |
| 410 | 640 | 71,04 | 2,598419149 |
| 420 | 643 | 71,373 | 2,610599238 |
| 430 | 644 | 71,484 | 2,614659268 |
| 440 | 646 | 71,706 | 2,622779328 |
| 450 | 649 | 72,039 | 2,634959418 |
| 460 | 650 | 72,15 | 2,639019448 |
| 470 | 652 | 72,372 | 2,647139508 |
| 480 | 653 | 72,483 | 2,651199538 |
| 490 | 653 | 72,483 | 2,651199538 |
| 500 | 653 | 72,483 | 2,651199538 |
| 510 | 654 | 72,594 | 2,655259568 |
| 520 | 654 | 72,594 | 2,655259568 |
| 530 | 654 | 72,594 | 2,655259568 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 214,5 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan = 101,2 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 85,2 gr Teg. Normal = 5 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 87 | 9,657 | 0,353222603 |
| 20 | 124 | 13,764 | 0,50344371 |
| 30 | 147 | 16,317 | 0,596824398 |
| 40 | 162 | 17,982 | 0,657724847 |
| 50 | 174 | 19,314 | 0,706445206 |
| 60 | 187 | 20,757 | 0,759225595 |
| 70 | 195 | 21,645 | 0,791705834 |
| 80 | 211 | 23,421 | 0,856666313 |
| 90 | 227 | 25,197 | 0,921626762 |
| 100 | 241 | 26,751 | 0,978467211 |
| 110 | 268 | 29,748 | 1,088088019 |
| 120 | 285 | 31,635 | 1,157108527 |
| 130 | 299 | 33,189 | 1,213948946 |
| 145 | 324 | 35,964 | 1,315449694 |
| 150 | 334 | 37,074 | 1,356049993 |
| 160 | 338 | 37,518 | 1,372290113 |
| 170 | 346 | 38,408 | 1,404770352 |
| 180 | 354 | 39,294 | 1,437250592 |
| 190 | 365 | 40,515 | 1,481910921 |
| 200 | 374 | 41,514 | 1,518451119 |
| 210 | 382 | 42,402 | 1,550931429 |
| 220 | 389 | 43,179 | 1,579351639 |
| 230 | 394 | 43,734 | 1,599651788 |
| 240 | 402 | 44,622 | 1,632132028 |
| 250 | 406 | 45,066 | 1,648372147 |
| 260 | 408 | 45,288 | 1,656492207 |
| 270 | 412 | 45,732 | 1,672732327 |
| 280 | 416 | 46,176 | 1,688972447 |
| 290 | 418 | 46,398 | 1,697092507 |
| 300 | 418 | 46,398 | 1,697092507 |
| 310 | 419 | 46,509 | 1,701152536 |
| 320 | 420 | 46,62 | 1,705212566 |
| 330 | 422 | 46,842 | 1,713332626 |
| 340 | 423 | 46,953 | 1,717392656 |
| 350 | 423 | 46,953 | 1,717392656 |
| 360 | 423 | 46,953 | 1,717392656 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 234,3 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan = 110,4 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 89,4 gr Teg. Normal = 10 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 31 | 3,441 | 0,125660928 |
| 20 | 142 | 15,762 | 0,576524249 |
| 30 | 158 | 17,538 | 0,641484727 |
| 40 | 169 | 18,759 | 0,686145056 |
| 50 | 186 | 20,646 | 0,755165565 |
| 60 | 194 | 21,534 | 0,787645804 |
| 70 | 238 | 26,418 | 0,966287121 |
| 80 | 254 | 28,194 | 1,0312476 |
| 90 | 273 | 30,303 | 1,108388168 |
| 100 | 288 | 31,968 | 1,169288617 |
| 110 | 305 | 33,855 | 1,238309126 |
| 120 | 318 | 35,298 | 1,291089515 |
| 130 | 325 | 36,075 | 1,319509724 |
| 145 | 337 | 37,407 | 1,368230083 |
| 150 | 342 | 37,962 | 1,388530233 |
| 160 | 357 | 39,627 | 1,449430681 |
| 170 | 361 | 40,071 | 1,465670801 |
| 180 | 376 | 41,736 | 1,52657125 |
| 190 | 388 | 43,068 | 1,575291609 |
| 200 | 395 | 43,845 | 1,603711818 |
| 210 | 412 | 45,732 | 1,672732327 |
| 220 | 423 | 46,953 | 1,717392656 |
| 230 | 437 | 48,507 | 1,774233075 |
| 240 | 441 | 48,951 | 1,790473195 |
| 250 | 448 | 49,728 | 1,818893404 |
| 260 | 452 | 50,172 | 1,835133524 |
| 270 | 456 | 50,616 | 1,851373643 |
| 280 | 458 | 50,838 | 1,859493703 |
| 290 | 461 | 51,171 | 1,871673793 |
| 300 | 468 | 51,948 | 1,900094002 |
| 310 | 471 | 52,281 | 1,912274092 |
| 320 | 474 | 52,614 | 1,924454182 |
| 330 | 476 | 52,836 | 1,932574242 |
| 340 | 477 | 52,947 | 1,936634272 |
| 350 | 479 | 53,169 | 1,944754332 |
| 360 | 482 | 53,502 | 1,956934421 |
| 370 | 482 | 53,502 | 1,956934421 |
| 380 | 483 | 53,613 | 1,960994451 |
| 390 | 483 | 53,613 | 1,960994451 |
| 400 | 483 | 53,613 | 1,960994451 |
| 410 | 482 | 53,502 | 1,956934421 |

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UJI GESER LANGSUNG AKAR BAMBUI MIJEN

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring =215,8 gr

Tanggal =Agustus 2006

Tnh.Basah+Cawan = 97,6 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 82,1 gr

Teg. Normal = 15 kg/cm²**PAKET II**

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 87 | 9,657 | 0,353222603 |
| 20 | 129 | 14,319 | 0,52374386 |
| 30 | 143 | 15,873 | 0,580584279 |
| 40 | 169 | 18,759 | 0,686145056 |
| 50 | 182 | 20,202 | 0,738925445 |
| 60 | 196 | 21,756 | 0,795765864 |
| 70 | 221 | 24,531 | 0,897266612 |
| 80 | 235 | 26,085 | 0,954107031 |
| 90 | 251 | 27,861 | 1,01906751 |
| 100 | 264 | 29,304 | 1,071847899 |
| 110 | 275 | 30,525 | 1,116508228 |
| 120 | 281 | 31,191 | 1,140868407 |
| 130 | 293 | 32,523 | 1,189588767 |
| 145 | 313 | 34,743 | 1,270789365 |
| 150 | 324 | 35,964 | 1,315449694 |
| 160 | 332 | 36,852 | 1,347929933 |
| 170 | 348 | 38,628 | 1,412890412 |
| 180 | 352 | 39,072 | 1,429130532 |
| 190 | 364 | 40,404 | 1,477850891 |
| 200 | 371 | 41,181 | 1,5062711 |
| 210 | 379 | 42,069 | 1,53875134 |
| 220 | 385 | 42,735 | 1,563111519 |
| 230 | 394 | 43,734 | 1,599651788 |
| 240 | 412 | 45,732 | 1,672732327 |
| 250 | 422 | 46,842 | 1,713332626 |
| 260 | 434 | 48,174 | 1,762052985 |
| 270 | 445 | 49,395 | 1,806713314 |
| 280 | 452 | 50,172 | 1,835133524 |
| 290 | 459 | 50,949 | 1,863553733 |
| 300 | 462 | 51,282 | 1,875733823 |
| 310 | 469 | 52,059 | 1,904154032 |
| 320 | 473 | 52,503 | 1,920394152 |
| 330 | 479 | 53,169 | 1,944754332 |
| 340 | 484 | 53,724 | 1,965054481 |
| 350 | 497 | 55,167 | 2,01783487 |
| 360 | 524 | 58,164 | 2,127455678 |
| 370 | 534 | 59,274 | 2,168055977 |
| 380 | 541 | 60,051 | 2,196476187 |
| 390 | 548 | 60,828 | 2,224896396 |
| 400 | 555 | 61,605 | 2,253316606 |
| 410 | 562 | 62,382 | 2,281736815 |
| 420 | 568 | 63,048 | 2,306096994 |
| 430 | 574 | 63,714 | 2,330457174 |
| 440 | 579 | 64,269 | 2,350757324 |
| 450 | 581 | 64,491 | 2,358877383 |
| 460 | 583 | 64,713 | 2,366997443 |
| 470 | 584 | 64,824 | 2,371057473 |
| 480 | 584 | 64,824 | 2,371057473 |
| 490 | 585 | 64,935 | 2,375117503 |
| 500 | 585 | 64,935 | 2,375117503 |
| 510 | 585 | 64,935 | 2,375117503 |
| 520 | 582 | 64,602 | 2,362937413 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 205 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan = 99,6 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan =78,6 gr Teg. Normal = 5 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 23 | 2,553 | 0,093380688 |
| 20 | 45 | 4,995 | 0,182701346 |
| 30 | 87 | 9,657 | 0,353222603 |
| 40 | 124 | 13,764 | 0,50344371 |
| 50 | 132 | 14,652 | 0,535923949 |
| 60 | 146 | 16,206 | 0,592764368 |
| 70 | 152 | 16,872 | 0,617124548 |
| 80 | 167 | 18,537 | 0,678024997 |
| 90 | 188 | 20,868 | 0,763285625 |
| 100 | 205 | 22,755 | 0,832306134 |
| 110 | 223 | 24,753 | 0,905386672 |
| 120 | 238 | 26,418 | 0,966287121 |
| 130 | 246 | 27,306 | 0,99876736 |
| 145 | 257 | 28,527 | 1,043427689 |
| 150 | 264 | 29,304 | 1,071847899 |
| 160 | 271 | 30,081 | 1,100268108 |
| 170 | 285 | 31,635 | 1,157108527 |
| 180 | 301 | 33,411 | 1,222069006 |
| 190 | 322 | 35,742 | 1,307329634 |
| 200 | 337 | 37,407 | 1,368230083 |
| 210 | 339 | 37,629 | 1,376350143 |
| 220 | 342 | 37,962 | 1,388530233 |
| 230 | 349 | 38,739 | 1,416950442 |
| 240 | 353 | 39,183 | 1,433190562 |
| 250 | 355 | 39,405 | 1,441310622 |
| 260 | 357 | 39,627 | 1,449430681 |
| 270 | 359 | 39,849 | 1,457550741 |
| 280 | 360 | 39,96 | 1,461610771 |
| 290 | 361 | 40,071 | 1,465670801 |
| 300 | 361 | 40,071 | 1,465670801 |
| 310 | 362 | 40,182 | 1,469730831 |
| 320 | 362 | 40,182 | 1,469730831 |
| 330 | 362 | 40,182 | 1,469730831 |
| 340 | 362 | 40,182 | 1,469730931 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 219,2 gr Tanggal = Agustus 2006
 Tnh.Basah+Cawan = 124,5 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan =87,8 gr Teg. Normal = 10 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 36 | 3,996 | 0,146161077 |
| 20 | 75 | 8,325 | 0,304502244 |
| 30 | 94 | 10,434 | 0,381642812 |
| 40 | 115 | 12,765 | 0,466903441 |
| 50 | 132 | 14,652 | 0,535923949 |
| 60 | 157 | 17,427 | 0,637424697 |
| 70 | 178 | 19,758 | 0,722685326 |
| 80 | 195 | 21,645 | 0,791705834 |
| 90 | 210 | 23,31 | 0,852606283 |
| 100 | 236 | 26,196 | 0,958167061 |
| 110 | 251 | 27,861 | 1,01906751 |
| 120 | 264 | 29,304 | 1,071847899 |
| 130 | 275 | 30,525 | 1,116508228 |
| 145 | 286 | 31,746 | 1,161168557 |
| 150 | 297 | 32,967 | 1,205828886 |
| 160 | 312 | 34,632 | 1,266729335 |
| 170 | 325 | 36,075 | 1,319509724 |
| 180 | 332 | 36,852 | 1,347929933 |
| 190 | 346 | 38,406 | 1,404770352 |
| 200 | 358 | 39,738 | 1,453490711 |
| 210 | 367 | 40,737 | 1,490030981 |
| 220 | 371 | 41,181 | 1,5062711 |
| 230 | 379 | 42,069 | 1,53875134 |
| 240 | 385 | 42,735 | 1,563111519 |
| 250 | 392 | 43,512 | 1,591531729 |
| 260 | 393 | 43,623 | 1,595591759 |
| 270 | 394 | 43,734 | 1,598651788 |
| 280 | 402 | 44,622 | 1,632132028 |
| 290 | 404 | 44,844 | 1,640252088 |
| 300 | 406 | 45,066 | 1,648372147 |
| 310 | 408 | 45,288 | 1,656492207 |
| 320 | 409 | 45,399 | 1,660552237 |
| 330 | 411 | 45,621 | 1,668672297 |
| 340 | 411 | 45,621 | 1,668672297 |
| 350 | 411 | 45,621 | 1,668672297 |

UJI GESER LANGSUNG AKAR BAMBU MIJEN

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 228,9 gr

Tanggal = Agustus 2006

Tnh.Basah+Cawan = 124,2 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 93,7 gr

Teg. Normal = 15 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 93 | 10,323 | 0,377582783 |
| 20 | 133 | 14,763 | 0,539983979 |
| 30 | 148 | 16,428 | 0,600884428 |
| 40 | 157 | 17,427 | 0,637424697 |
| 50 | 163 | 18,093 | 0,661784877 |
| 60 | 177 | 19,647 | 0,718625296 |
| 70 | 186 | 20,646 | 0,755165565 |
| 80 | 193 | 21,423 | 0,783585775 |
| 90 | 235 | 26,085 | 0,954107031 |
| 100 | 248 | 27,528 | 1,00688742 |
| 110 | 256 | 28,416 | 1,039367659 |
| 120 | 258 | 28,638 | 1,047487719 |
| 130 | 260 | 28,86 | 1,055607779 |
| 145 | 261 | 28,971 | 1,059667809 |
| 150 | 261 | 28,971 | 1,059667809 |
| 160 | 262 | 29,082 | 1,063727839 |
| 170 | 268 | 29,748 | 1,088088019 |
| 180 | 279 | 30,969 | 1,132748348 |
| 190 | 286 | 31,746 | 1,161168557 |
| 200 | 295 | 32,745 | 1,197708826 |
| 210 | 334 | 37,074 | 1,356049993 |
| 220 | 357 | 39,627 | 1,449430681 |
| 230 | 368 | 40,848 | 1,494091011 |
| 240 | 379 | 42,069 | 1,53875134 |
| 250 | 381 | 42,291 | 1,546871399 |
| 260 | 396 | 43,956 | 1,607771848 |
| 270 | 421 | 46,731 | 1,709272596 |
| 280 | 437 | 48,507 | 1,774233075 |
| 290 | 448 | 49,728 | 1,818893404 |
| 300 | 456 | 50,616 | 1,851373643 |
| 310 | 478 | 53,058 | 1,940694302 |
| 320 | 491 | 54,501 | 1,993474691 |
| 330 | 534 | 59,274 | 2,168055977 |
| 340 | 545 | 60,495 | 2,212716306 |
| 350 | 552 | 61,272 | 2,241136516 |
| 360 | 561 | 62,271 | 2,277676785 |
| 370 | 578 | 64,158 | 2,346697294 |
| 380 | 582 | 64,602 | 2,362937413 |
| 390 | 589 | 65,379 | 2,391357623 |
| 400 | 592 | 65,712 | 2,403537713 |
| 410 | 596 | 66,156 | 2,419777832 |
| 420 | 598 | 66,378 | 2,427897892 |
| 430 | 601 | 66,711 | 2,440077982 |
| 440 | 602 | 66,822 | 2,444138012 |
| 450 | 602 | 66,822 | 2,444138012 |
| 460 | 604 | 67,044 | 2,452258072 |
| 470 | 604 | 67,044 | 2,452258072 |
| 480 | 604 | 67,044 | 2,452258072 |
| 490 | 603 | 66,933 | 2,448198042 |
| 500 | 604 | 67,044 | 2,452258072 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 214,5 gr Tanggal = 5 Juni 2006
 Tnh.Basah+Cawan = 100,3 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 77 gr Teg. Normal = 5 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 50 | 5,55 | 0,203001496 |
| 20 | 48 | 5,328 | 0,194881436 |
| 30 | 43 | 4,773 | 0,174581287 |
| 40 | 49 | 5,439 | 0,198941466 |
| 50 | 50 | 5,55 | 0,203001496 |
| 60 | 50 | 5,55 | 0,203001496 |
| 70 | 93 | 10,323 | 0,377582783 |
| 80 | 117 | 12,987 | 0,475023501 |
| 90 | 136 | 15,096 | 0,552164069 |
| 100 | 151 | 16,761 | 0,613064518 |
| 110 | 160 | 17,76 | 0,649604787 |
| 120 | 170 | 18,87 | 0,690205086 |
| 130 | 178 | 19,758 | 0,722685326 |
| 145 | 183 | 20,313 | 0,742985475 |
| 150 | 189 | 20,979 | 0,767345655 |
| 160 | 193 | 21,423 | 0,783585775 |
| 170 | 194 | 21,534 | 0,787645804 |
| 180 | 196 | 21,756 | 0,795765864 |
| 190 | 199 | 22,089 | 0,807945954 |
| 200 | 199 | 22,089 | 0,807945954 |
| 210 | 200 | 22,2 | 0,812005984 |
| 220 | 200 | 22,2 | 0,812005984 |
| 230 | 198 | 21,978 | 0,803885924 |
| 240 | 198 | 21,978 | 0,803885924 |
| 250 | 197 | 21,867 | 0,799825894 |
| 260 | 196 | 21,756 | 0,795765864 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 216,3 gr Tanggal = 6 Juni 2006
 Tnh.Basah+Cawan = 86,5 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 70,6 gr Teg. Normal = 10 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 88 | 9,768 | 0,357282633 |
| 20 | 163 | 18,093 | 0,661784877 |
| 30 | 208 | 23,088 | 0,844486223 |
| 40 | 241 | 26,751 | 0,978467211 |
| 50 | 277 | 30,747 | 1,124628288 |
| 60 | 310 | 34,41 | 1,258609275 |
| 70 | 343 | 38,073 | 1,392590263 |
| 80 | 369 | 40,959 | 1,49815104 |
| 90 | 391 | 43,401 | 1,587471699 |
| 100 | 419 | 46,509 | 1,701152536 |
| 110 | 447 | 49,617 | 1,814833374 |
| 120 | 447 | 49,617 | 1,814833374 |
| 130 | 450 | 49,95 | 1,827013464 |
| 145 | 452 | 50,172 | 1,835133524 |
| 150 | 452 | 50,172 | 1,835133524 |
| 160 | 455 | 50,505 | 1,847313614 |
| 170 | 458 | 50,838 | 1,859493703 |
| 180 | 456 | 50,616 | 1,851373643 |
| 190 | 453 | 50,283 | 1,839193554 |
| 200 | 448 | 49,728 | 1,818893404 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 226,8 gr Tanggal = 8 Juni 2006
 Tnh.Basah+Cawan = 96,3 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 78,6 gr Teg. Normal = 15 kg/cm²

PAKET I

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 93 | 10,323 | 0,377582783 |
| 20 | 153 | 16,983 | 0,621184578 |
| 30 | 192 | 21,312 | 0,779525745 |
| 40 | 229 | 25,419 | 0,929746852 |
| 50 | 275 | 30,525 | 1,116508228 |
| 60 | 296 | 32,856 | 1,201768856 |
| 70 | 330 | 36,63 | 1,339809874 |
| 80 | 357 | 39,627 | 1,449430681 |
| 90 | 385 | 42,735 | 1,563111519 |
| 100 | 415 | 46,065 | 1,684912417 |
| 110 | 451 | 50,061 | 1,831073494 |
| 120 | 479 | 53,169 | 1,944754332 |
| 130 | 505 | 56,055 | 2,05031511 |
| 145 | 528 | 58,608 | 2,143695798 |
| 150 | 550 | 61,05 | 2,233016456 |
| 160 | 566 | 62,826 | 2,297976935 |
| 170 | 574 | 63,714 | 2,330457174 |
| 180 | 576 | 63,936 | 2,338577234 |
| 190 | 576 | 63,936 | 2,338577234 |
| 200 | 578 | 64,158 | 2,346697294 |
| 210 | 579 | 64,269 | 2,350757324 |
| 220 | 578 | 64,158 | 2,346697294 |
| 230 | 579 | 64,269 | 2,350757324 |
| 240 | 579 | 64,269 | 2,350757324 |
| 250 | 574 | 63,714 | 2,330457174 |
| 260 | 573 | 63,603 | 2,326397144 |
| 270 | 573 | 63,603 | 2,326397144 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 218 gr

Tanggal = 10 Juni 2006

Tnh.Basah+Cawan = 92,8 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 78,6 gr

Teg. Normal = 15 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 57 | 6,327 | 0,231421705 |
| 20 | 101 | 11,211 | 0,410063022 |
| 30 | 143 | 15,873 | 0,580584279 |
| 40 | 179 | 19,869 | 0,726745356 |
| 50 | 210 | 23,31 | 0,852606283 |
| 60 | 240 | 26,64 | 0,974407181 |
| 70 | 264 | 29,304 | 1,071847899 |
| 80 | 280 | 31,08 | 1,136808378 |
| 90 | 307 | 34,077 | 1,246429185 |
| 100 | 328 | 36,408 | 1,331689814 |
| 110 | 352 | 39,072 | 1,429130522 |
| 120 | 386 | 42,846 | 1,567171549 |
| 130 | 411 | 45,621 | 1,668672297 |
| 145 | 435 | 48,285 | 1,766113015 |
| 150 | 446 | 49,506 | 1,810773344 |
| 160 | 469 | 52,059 | 1,904154032 |
| 170 | 484 | 53,724 | 1,965054481 |
| 180 | 498 | 55,278 | 2,0218949 |
| 190 | 512 | 56,832 | 2,078735319 |
| 200 | 525 | 58,275 | 2,131515708 |
| 210 | 537 | 59,607 | 2,180236067 |
| 220 | 547 | 60,717 | 2,220836366 |
| 230 | 554 | 61,494 | 2,249256576 |
| 240 | 559 | 62,049 | 2,269556725 |
| 250 | 565 | 62,715 | 2,293916905 |
| 260 | 570 | 63,27 | 2,314217054 |
| 270 | 575 | 63,825 | 2,334517204 |
| 280 | 579 | 64,269 | 2,350757324 |
| 290 | 583 | 64,713 | 2,366997443 |
| 300 | 585 | 64,935 | 2,375117503 |
| 310 | 588 | 65,268 | 2,387297593 |
| 320 | 589 | 65,379 | 2,391357623 |
| 330 | 590 | 65,49 | 2,395417653 |
| 340 | 590 | 65,49 | 2,395417653 |
| 350 | 590 | 65,49 | 2,395417653 |
| 360 | 585 | 64,935 | 2,375117503 |
| 370 | 580 | 64,38 | 2,354817354 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 212,5 gr Tanggal = 10 Juni 2006
 Tnh.Basah+Cawan = 115,4 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 87,1 gr Teg. Normal = 5 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 8 | 0,888 | 0,032480239 |
| 20 | 24 | 2,664 | 0,097440718 |
| 30 | 38 | 4,218 | 0,154281137 |
| 40 | 46 | 5,106 | 0,186761376 |
| 50 | 51 | 5,661 | 0,207061526 |
| 60 | 68 | 7,548 | 0,276082035 |
| 70 | 84 | 9,324 | 0,341042513 |
| 80 | 124 | 13,764 | 0,50344371 |
| 90 | 136 | 15,096 | 0,552164069 |
| 100 | 141 | 15,651 | 0,572464219 |
| 110 | 158 | 17,538 | 0,641484727 |
| 120 | 164 | 18,204 | 0,665844907 |
| 130 | 175 | 19,425 | 0,710505236 |
| 145 | 179 | 19,869 | 0,726745356 |
| 150 | 181 | 20,091 | 0,734865415 |
| 160 | 186 | 20,646 | 0,755165565 |
| 170 | 197 | 21,867 | 0,799825894 |
| 180 | 204 | 22,644 | 0,828246104 |
| 190 | 216 | 23,976 | 0,876966463 |
| 200 | 227 | 25,197 | 0,921626792 |
| 210 | 230 | 25,53 | 0,933806882 |
| 220 | 230 | 25,53 | 0,933806882 |
| 230 | 233 | 25,863 | 0,945986971 |
| 240 | 234 | 25,974 | 0,950047001 |
| 250 | 236 | 26,196 | 0,958167061 |
| 260 | 237 | 26,307 | 0,962227091 |
| 270 | 239 | 26,529 | 0,970347151 |
| 280 | 239 | 26,529 | 0,970347151 |
| 290 | 239 | 26,529 | 0,970347151 |
| 300 | 238 | 26,418 | 0,966287121 |
| 310 | 238 | 26,418 | 0,966287121 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 231,4 gr Tanggal = 11 Juni 2006
 Tnh.Basah+Cawan = 175,3 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan = 72,8 gr Teg. Normal = 10 kg/cm²

PAKET III

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 24 | 2,664 | 0,097440718 |
| 20 | 42 | 4,662 | 0,170521257 |
| 30 | 58 | 6,438 | 0,235481735 |
| 40 | 69 | 7,659 | 0,280142064 |
| 50 | 84 | 9,324 | 0,341042513 |
| 60 | 107 | 11,877 | 0,434423201 |
| 70 | 138 | 15,318 | 0,560284129 |
| 80 | 156 | 17,316 | 0,633364667 |
| 90 | 176 | 19,536 | 0,714565266 |
| 100 | 198 | 21,978 | 0,803885924 |
| 110 | 216 | 23,976 | 0,876966463 |
| 120 | 225 | 24,975 | 0,913506732 |
| 130 | 237 | 26,307 | 0,962227091 |
| 145 | 241 | 26,751 | 0,978467211 |
| 150 | 249 | 27,639 | 1,01094745 |
| 160 | 254 | 28,194 | 1,0312476 |
| 170 | 261 | 28,971 | 1,059667809 |
| 180 | 262 | 29,082 | 1,063727839 |
| 190 | 263 | 29,193 | 1,067787869 |
| 200 | 263 | 29,193 | 1,067787869 |
| 210 | 264 | 29,304 | 1,071847899 |
| 220 | 264 | 29,304 | 1,071847899 |
| 230 | 264 | 29,304 | 1,071847899 |
| 240 | 263 | 29,193 | 1,067787869 |
| 250 | 263 | 29,193 | 1,067787869 |
| 260 | 263 | 29,193 | 1,067787869 |
| 270 | 263 | 29,193 | 1,067787869 |

UJI GESER LANGSUNG AKAR BAMBU TEMBALANG

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 205,7 gr

Tanggal = 12 Juni 2006

Tnh.Basah+Cawan = 113,2 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 75,8 gr

Teg. Normal = 15 kg/cm²

PAKET III

| Peralihan Horisontal (mm) | Load Dial Reading (div) | Beban Horisontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------------|-------------------------------|-----------------------------|--|
| 10 | 53 | 5,883 | 0,215181586 |
| 20 | 127 | 14,097 | 0,5156238 |
| 30 | 148 | 16,428 | 0,600884428 |
| 40 | 162 | 17,982 | 0,657724847 |
| 50 | 173 | 19,203 | 0,702385176 |
| 60 | 243 | 26,973 | 0,986587271 |
| 70 | 264 | 29,304 | 1,071847899 |
| 80 | 288 | 31,968 | 1,169288617 |
| 90 | 294 | 32,634 | 1,193648796 |
| 100 | 311 | 34,521 | 1,262669305 |
| 110 | 347 | 38,517 | 1,408830382 |
| 120 | 352 | 39,072 | 1,429130532 |
| 130 | 364 | 40,404 | 1,477850891 |
| 145 | 386 | 42,846 | 1,567171549 |
| 150 | 393 | 43,623 | 1,595591759 |
| 160 | 427 | 47,397 | 1,733632776 |
| 170 | 438 | 48,618 | 1,778293105 |
| 180 | 452 | 50,172 | 1,835133524 |
| 190 | 464 | 51,504 | 1,883853883 |
| 200 | 481 | 53,391 | 1,952874391 |
| 210 | 496 | 55,056 | 2,01377484 |
| 220 | 527 | 58,497 | 2,139635768 |
| 230 | 536 | 59,496 | 2,176176037 |
| 240 | 542 | 60,162 | 2,200536217 |
| 250 | 548 | 60,828 | 2,224896396 |
| 260 | 603 | 66,933 | 2,448198042 |
| 270 | 615 | 68,265 | 2,496918401 |
| 280 | 629 | 69,819 | 2,55375882 |
| 290 | 634 | 70,374 | 2,574058969 |
| 300 | 642 | 71,262 | 2,606539209 |
| 310 | 646 | 71,706 | 2,622779328 |
| 320 | 651 | 72,261 | 2,643079478 |
| 330 | 651 | 72,261 | 2,643079478 |
| 340 | 653 | 72,483 | 2,651199538 |
| 350 | 653 | 72,483 | 2,651199538 |
| 360 | 652 | 72,372 | 2,647139508 |
| 370 | 652 | 72,372 | 2,647139508 |

UJI GESER LANGSUNG AKAR BAMBU GAJAHMUNGKUR

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 225,8gr

Tanggal = September 2006

Tnh.Basah+Cawan = 105,6gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan = 83gr

Teg. Normal = 15 kg/cm²**PAKET I**

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 55 | 6,105 | 0,223301646 |
| 20 | 89 | 9,879 | 0,361342663 |
| 30 | 119 | 13,209 | 0,48314356 |
| 40 | 145 | 16,095 | 0,588704338 |
| 50 | 172 | 19,092 | 0,698325146 |
| 60 | 190 | 21,09 | 0,771405685 |
| 70 | 210 | 23,31 | 0,852606283 |
| 80 | 229 | 25,419 | 0,929746852 |
| 90 | 246 | 27,306 | 0,99876736 |
| 100 | 261 | 28,971 | 1,059667809 |
| 110 | 280 | 31,08 | 1,136808378 |
| 120 | 288 | 31,968 | 1,169288617 |
| 130 | 300 | 33,3 | 1,218008976 |
| 145 | 310 | 34,41 | 1,258609275 |
| 150 | 320 | 35,52 | 1,299209574 |
| 160 | 330 | 36,63 | 1,339809874 |
| 170 | 340 | 37,74 | 1,380410173 |
| 180 | 346 | 38,406 | 1,404770352 |
| 190 | 355 | 39,405 | 1,441310622 |
| 200 | 364 | 40,404 | 1,477850891 |
| 210 | 370 | 41,07 | 1,50221107 |
| 220 | 378 | 41,958 | 1,53469131 |
| 230 | 382 | 42,402 | 1,550931429 |
| 240 | 387 | 42,957 | 1,571231579 |
| 250 | 392 | 43,512 | 1,591531729 |
| 260 | 396 | 43,956 | 1,607771848 |
| 270 | 399 | 44,289 | 1,619951938 |
| 280 | 401 | 44,511 | 1,628071998 |
| 300 | 404 | 44,844 | 1,640252088 |
| 310 | 406 | 45,066 | 1,648372147 |
| 320 | 409 | 45,399 | 1,660552237 |
| 330 | 410 | 45,51 | 1,664612267 |
| 340 | 412 | 45,732 | 1,672732327 |
| 350 | 414 | 45,954 | 1,680852387 |
| 360 | 415 | 46,065 | 1,684912417 |
| 370 | 415 | 46,065 | 1,684912417 |
| 380 | 416 | 46,176 | 1,688972447 |
| 390 | 417 | 46,287 | 1,693032477 |
| 400 | 418 | 46,398 | 1,697092507 |
| 410 | 418 | 46,398 | 1,697092507 |
| 420 | 418 | 46,398 | 1,697092507 |

UJI GESER LANGSUNG AKAR BAMBU GAJAHMUNGKUR

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 223,3 gr Tanggal = September 2006
 Tnh.Basah+Cawan =112,1 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan =84,7 gr Teg. Normal = 5 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------------|-------------------------------|-----------------------------|--|
| 10 | 18 | 1,998 | 0,073080539 |
| 20 | 37 | 4,107 | 0,150221107 |
| 30 | 61 | 6,771 | 0,247661825 |
| 40 | 79 | 8,769 | 0,320742364 |
| 50 | 90 | 9,99 | 0,365402693 |
| 60 | 115 | 12,765 | 0,466903441 |
| 70 | 137 | 15,207 | 0,556224099 |
| 80 | 158 | 17,538 | 0,641484727 |
| 90 | 171 | 18,981 | 0,694265116 |
| 100 | 183 | 20,313 | 0,742985475 |
| 110 | 196 | 21,756 | 0,795765864 |
| 120 | 225 | 24,975 | 0,913506732 |
| 130 | 237 | 26,307 | 0,962227091 |
| 145 | 243 | 26,973 | 0,986587271 |
| 150 | 259 | 28,749 | 1,051547749 |
| 160 | 268 | 29,748 | 1,088086019 |
| 170 | 276 | 30,636 | 1,120568258 |
| 180 | 287 | 31,857 | 1,165228587 |
| 190 | 294 | 32,634 | 1,193648796 |
| 200 | 311 | 34,521 | 1,262369305 |
| 210 | 316 | 35,076 | 1,282969455 |
| 220 | 318 | 35,298 | 1,291089515 |
| 230 | 319 | 35,409 | 1,295149544 |
| 240 | 320 | 35,52 | 1,299209574 |
| 250 | 320 | 35,52 | 1,299209574 |
| 260 | 320 | 35,52 | 1,299209574 |

UJI GESER LANGSUNG AKAR BAMBU GAJAHMUNGKUR

Cawan = 4,8 gr Operator = Sisca+Agung
 Tanah+Ring = 225,3 gr Tanggal = September 2006
 Tnh.Basah+Cawan =103,7 gr Penampang = 27,3397 cm²
 Tnh.Kering+Cawan =93,1 gr Teg. Normal = 10 kg/cm²

PAKET II

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------------|-------------------------------|-----------------------------|--|
| 10 | 54 | 5,994 | 0,219241616 |
| 20 | 86 | 9,546 | 0,349162573 |
| 30 | 116 | 12,876 | 0,470963471 |
| 40 | 142 | 15,762 | 0,576524249 |
| 50 | 158 | 17,538 | 0,641484727 |
| 60 | 175 | 19,425 | 0,710505236 |
| 70 | 197 | 21,867 | 0,799825894 |
| 80 | 214 | 23,754 | 0,868846403 |
| 90 | 238 | 26,418 | 0,966287121 |
| 100 | 252 | 27,972 | 1,02312754 |
| 110 | 276 | 30,636 | 1,120568258 |
| 120 | 299 | 33,189 | 1,213948946 |
| 130 | 325 | 36,075 | 1,319509724 |
| 145 | 347 | 38,517 | 1,408830382 |
| 150 | 364 | 40,404 | 1,477850891 |
| 160 | 379 | 42,069 | 1,53875134 |
| 170 | 394 | 43,734 | 1,599651788 |
| 180 | 408 | 45,288 | 1,656492207 |
| 190 | 419 | 46,509 | 1,701152536 |
| 200 | 431 | 47,841 | 1,749872895 |
| 210 | 342 | 37,962 | 1,388530233 |
| 220 | 356 | 39,516 | 1,445370651 |
| 230 | 368 | 40,848 | 1,494091011 |
| 240 | 375 | 41,625 | 1,52251122 |
| 250 | 384 | 42,624 | 1,559051489 |
| 260 | 390 | 43,29 | 1,583411669 |
| 270 | 398 | 44,178 | 1,615891908 |
| 280 | 411 | 45,621 | 1,668672297 |
| 290 | 427 | 47,397 | 1,733632776 |
| 300 | 431 | 47,841 | 1,749872895 |
| 310 | 447 | 49,617 | 1,814833374 |
| 320 | 458 | 50,838 | 1,859493703 |
| 330 | 462 | 51,282 | 1,875733823 |
| 340 | 479 | 53,169 | 1,944754332 |
| 350 | 485 | 53,835 | 1,969114511 |
| 360 | 493 | 54,723 | 2,00159475 |
| 370 | 499 | 55,389 | 2,02595493 |
| 380 | 505 | 56,055 | 2,05031511 |
| 390 | 510 | 56,61 | 2,070615259 |
| 400 | 514 | 57,054 | 2,086855379 |
| 410 | 518 | 57,498 | 2,103095498 |
| 420 | 521 | 57,831 | 2,115275588 |
| 430 | 524 | 58,164 | 2,127455678 |
| 440 | 525 | 58,275 | 2,131515708 |
| 450 | 525 | 58,275 | 2,131515708 |
| 460 | 525 | 58,275 | 2,131515708 |
| 470 | 523 | 58,053 | 2,123395648 |
| 480 | 523 | 58,053 | 2,123395648 |

UJI GESER LANGSUNG AKAR BAMBU GAJAHMUNGKUR

Cawan = 4,8 gr

Operator = Sisca+Agung

Tanah+Ring = 239,5 gr

Tanggal = September 2006

Tnh.Basah+Cawan =101,4 gr

Penampang = 27,3397 cm²

Tnh.Kering+Cawan =86,5 gr

Teg. Normal = 15 kg/cm²**PAKET II**

| Peralihan Horisontal (mm) | Load Dial Reading (div) | Beban Horisontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------------|-------------------------------|-----------------------------|--|
| 10 | 61 | 6,771 | 0,247661825 |
| 20 | 90 | 9,99 | 0,365402693 |
| 30 | 125 | 13,875 | 0,50750374 |
| 40 | 155 | 17,205 | 0,629304638 |
| 50 | 186 | 20,646 | 0,755165565 |
| 60 | 213 | 23,643 | 0,864786373 |
| 70 | 248 | 27,528 | 1,00688742 |
| 80 | 276 | 30,636 | 1,120568258 |
| 90 | 307 | 34,077 | 1,246429185 |
| 100 | 339 | 37,629 | 1,376350143 |
| 110 | 362 | 40,182 | 1,469730831 |
| 120 | 394 | 43,734 | 1,599651788 |
| 130 | 415 | 46,065 | 1,684912417 |
| 145 | 447 | 49,617 | 1,814833374 |
| 150 | 471 | 52,281 | 1,912274092 |
| 160 | 493 | 54,723 | 2,00159475 |
| 170 | 518 | 57,498 | 2,103095498 |
| 180 | 534 | 59,274 | 2,168055977 |
| 190 | 554 | 61,494 | 2,249256576 |
| 200 | 578 | 64,158 | 2,346697294 |
| 210 | 591 | 65,601 | 2,399477683 |
| 220 | 612 | 67,932 | 2,484738311 |
| 230 | 629 | 69,819 | 2,55375882 |
| 240 | 637 | 70,707 | 2,586239059 |
| 250 | 648 | 71,928 | 2,630899388 |
| 260 | 657 | 72,927 | 2,667439657 |
| 270 | 666 | 73,926 | 2,703979927 |
| 280 | 685 | 76,035 | 2,781120495 |
| 290 | 694 | 77,034 | 2,817660764 |
| 300 | 710 | 78,81 | 2,882621243 |
| 310 | 719 | 79,809 | 2,919161512 |
| 320 | 731 | 81,141 | 2,967881871 |
| 330 | 747 | 82,917 | 3,03284235 |
| 340 | 765 | 84,915 | 3,105922889 |
| 350 | 779 | 86,469 | 3,162763308 |
| 360 | 802 | 89,022 | 3,256143996 |
| 370 | 822 | 91,242 | 3,337344594 |
| 380 | 835 | 92,685 | 3,390124983 |
| 390 | 846 | 93,906 | 3,434785312 |
| 400 | 856 | 95,016 | 3,475385611 |
| 410 | 865 | 96,015 | 3,511925881 |
| 420 | 873 | 96,903 | 3,54440612 |
| 430 | 881 | 97,791 | 3,576886359 |
| 440 | 887 | 98,457 | 3,601246539 |
| 450 | 895 | 99,345 | 3,633726778 |
| 460 | 896 | 99,456 | 3,637786808 |
| 470 | 896 | 99,456 | 3,637786808 |
| 480 | 897 | 99,567 | 3,641846838 |
| 490 | 897 | 99,567 | 3,641846838 |
| 500 | 897 | 99,567 | 3,641846838 |
| 510 | 897 | 99,567 | 3,641846838 |
| 520 | 895 | 99,345 | 3,633726778 |

UJI GESER LANGSUNG TANAH ASLI BANYUMANIK

Cawan = 4,8 gr
 Tanah+Ring = 221,3 gr
 Tnh.Basah+Cawan = 103,5 gr
 Tnh.Kering+Cawan = 75,9 gr

Operator = Sisca+Agung
 Tanggal = July 2006
 Penampang = 27,3397 cm²
 Teg. Normal = 5 kg/cm²

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 26 | 2,886 | 0,105560778 |
| 20 | 47 | 10,656 | 0,389762872 |
| 30 | 57 | 18,315 | 0,669904937 |
| 40 | 68 | 25,419 | 0,929746852 |
| 50 | 78 | 32,634 | 1,193648796 |
| 60 | 88 | 36,519 | 1,335749844 |
| 70 | 97 | 40,848 | 1,494091011 |
| 80 | 102 | 44,955 | 1,644312118 |
| 90 | 109 | 48,951 | 1,780473195 |
| 100 | 119 | 53,502 | 1,956934421 |
| 110 | 125 | 55,944 | 2,04625508 |
| 120 | 130 | 59,718 | 2,184286097 |
| 130 | 138 | 63,159 | 2,310157024 |
| 140 | 143 | 64,602 | 2,362937413 |
| 150 | 147 | 68,265 | 2,496918401 |
| 160 | 150 | 70,818 | 2,590299089 |
| 170 | 153 | 72,594 | 2,655259568 |
| 180 | 157 | 75,036 | 2,744580226 |
| 180 | 161 | 77,478 | 2,833900884 |
| 200 | 164 | 79,698 | 2,915101482 |
| 210 | 167 | 81,807 | 2,992242051 |
| 220 | 169 | 83,25 | 3,04502244 |
| 230 | 171 | 84,249 | 3,081562709 |
| 240 | 173 | 85,581 | 3,130283068 |
| 250 | 175 | 86,913 | 3,179003427 |
| 260 | 176 | 88,8 | 3,248023936 |
| 270 | 177 | 88,8 | 3,248023936 |
| 280 | 178 | 87,801 | 3,211483667 |
| 290 | 178 | 87,801 | 3,211483667 |
| 300 | 179 | 87,69 | 3,207423637 |
| 310 | 179 | 87,69 | 3,207423637 |
| 320 | 179 | 87,69 | 3,207423637 |
| 330 | 179 | 87,69 | 3,207423637 |

UJI GESER LANGSUNG TANAH ASLI BANYUMANIK

Cawan = 4,8 gr
 Tanah+Ring = 212,6 gr
 Tnh.Basah+Cawan = 99,3 gr
 Tnh.Kering+Cawan = 74,7 gr

Operator = Sisca+Agung
 Tanggal = July 2006
 Penampang = 27,3397 cm²
 Teg. Normal = 10 kg/cm²

| Peralihan Horizontal (mm) | Load Dial Reading (div) | Beban Horizontal (kg) | Tegangan Geser (kg/cm ²) |
|---------------------------|-------------------------|-----------------------|--------------------------------------|
| 10 | 13 | 1,443 | 0,052780389 |
| 20 | 14 | 1,554 | 0,056840419 |
| 30 | 14 | 1,554 | 0,056840419 |
| 40 | 15 | 1,665 | 0,060900449 |
| 50 | 26 | 2,886 | 0,105560778 |
| 60 | 51 | 5,061 | 0,207061526 |
| 70 | 66 | 7,326 | 0,267961975 |
| 80 | 83 | 9,213 | 0,336982483 |
| 90 | 101 | 11,211 | 0,410083022 |
| 100 | 121 | 13,431 | 0,49126362 |
| 110 | 139 | 15,429 | 0,564344159 |
| 120 | 151 | 16,761 | 0,613064518 |
| 130 | 168 | 18,648 | 0,682085027 |
| 140 | 178 | 19,758 | 0,722685326 |
| 150 | 182 | 20,202 | 0,738925445 |
| 160 | 194 | 21,534 | 0,787645804 |
| 170 | 206 | 22,866 | 0,836366163 |
| 180 | 218 | 24,198 | 0,885086523 |
| 190 | 223 | 24,753 | 0,905386672 |
| 200 | 238 | 26,418 | 0,966287121 |
| 210 | 247 | 27,417 | 1,00282739 |
| 220 | 256 | 28,416 | 1,039367659 |
| 230 | 266 | 29,526 | 1,079967959 |
| 240 | 274 | 30,414 | 1,112448198 |
| 250 | 282 | 31,302 | 1,144928437 |
| 260 | 289 | 32,079 | 1,173348647 |
| 270 | 293 | 32,523 | 1,189588767 |
| 280 | 297 | 32,967 | 1,205828886 |
| 290 | 302 | 33,522 | 1,226129036 |
| 300 | 305 | 33,855 | 1,238309126 |
| 310 | 307 | 34,077 | 1,246429185 |
| 320 | 309 | 34,299 | 1,254549245 |
| 330 | 310 | 34,41 | 1,258609275 |
| 340 | 310 | 34,41 | 1,258609275 |
| 350 | 311 | 34,521 | 1,262669305 |
| 360 | 311 | 34,521 | 1,262669305 |
| 370 | 311 | 34,521 | 1,262669305 |