LAMPIRAN

**Lampiran 1. Kadar Air**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok** | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 50.01 | 43.96 | 48.65 | 142.61 | 47.54 |
| Sorgum 5 g, 15 hari | 46.61 | 40.99 | 45.19 | 132.78 | 44.26 |
| Sorgum 5 g, 20 hari | 46.09 | 41.99 | 43.62 | 131.69 | 43.90 |
| Sorgum 8 g, 10 hari | 48.59 | 41.32 | 45.35 | 135.26 | 45.09 |
| Sorgum 8 g, 15 hari | 46.21 | 42.80 | 41.51 | 130.52 | 43.51 |
| Sorgum 8 g, 20 hari | 40.20 | 43.33 | 41.87 | 125.39 | 41.80 |
| Sorgum 11 g, 10 hari | 47.02 | 43.97 | 48.33 | 139.32 | 46.44 |
| Sorgum 11 g, 15 hari | 43.12 | 43.31 | 39.25 | 125.68 | 41.89 |
| Sorgum 11 g, 20 hari | 45.56 | 42.60 | 43.62 | 131.77 | 43.92 |

Jumlah total : 1195

Jumlah data : 27

Jumlah kelompok : 3

Jumlah kombinasi : 9

Faktor koreksi : 52890

KV : 4,61

**Editor uji DMRT pada parameter kadar air untuk SAS**

Data;

input plk$1-4S$1-2H$3-4 blok AIR;

SH = S||H;

cards;

S1H1 1 50.01

S1H1 2 43.96

S1H1 3 48.65

S1H2 1 46.61

S1H2 2 40.99

S1H2 3 45.19

S1H3 1 46.09

S1H3 2 41.99

S1H3 3 43.62

S2H1 1 48.59

S2H1 2 41.32

S2H1 3 45.35

S2H2 1 46.21

S2H2 2 42.80

S2H2 3 41.51

S2H3 1 40.20

S2H3 2 43.33

S2H3 3 41.87

S3H1 1 47.02

S3H1 2 43.97

S3H1 3 48.33

S3H2 1 43.12

S3H2 2 43.31

S3H2 3 39.25

S3H3 1 45.56

S3H3 2 42.60

S3H3 3 43.62

;

proc glm;

class blok S H;

model AIR = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model AIR = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model AIR = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model AIR = plk;

means plk/HOVTEST=BARTLETT;

run;

**Lampiran 2. Total Padatan Terlarut**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok** | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 8.80 | 6.90 | 6.50 | 22.20 | 7.40 |
| Sorgum 5 g, 15 hari | 8.90 | 7.60 | 6.50 | 23.00 | 7.67 |
| Sorgum 5 g, 20 hari | 9.00 | 7.70 | 7.00 | 23.70 | 7.90 |
| Sorgum 8 g, 10 hari | 8.80 | 7.60 | 6.60 | 23.00 | 7.67 |
| Sorgum 8 g, 15 hari | 8.85 | 6.00 | 7.20 | 22.05 | 7.35 |
| Sorgum 8 g, 20 hari | 8.80 | 6.80 | 7.00 | 22.60 | 7.53 |
| Sorgum 11 g, 10 hari | 8.90 | 6.20 | 7.60 | 22.70 | 7.57 |
| Sorgum 11 g, 15 hari | 8.50 | 6.20 | 7.80 | 22.50 | 7.50 |
| Sorgum 11 g, 20 hari | 9.00 | 7.40 | 7.70 | 24.10 | 8.03 |

Jumlah data : 205,85

Jumlah data : 27

Jumlah kelompok : 3

Jumlah kombinasi : 9

Faktor koreksi : 1569

KV : 7.14

**Editor uji DMRT pada parameter total padatan terlarut untuk SAS**

Data;

input plk$1-4S$1-2H$3-4 blok BRIX;

SH = S||H;

cards;

S1H1 1 8.80

S1H1 2 6.90

S1H1 3 6.50

S1H2 1 8.90

S1H2 2 7.60

S1H2 3 6.50

S1H3 1 9.00

S1H3 2 7.70

S1H3 3 7.00

S2H1 1 8.80

S2H1 2 7.60

S2H1 3 6.60

S2H2 1 8.85

S2H2 2 6.00

S2H2 3 7.20

S2H3 1 8.80

S2H3 2 6.80

S2H3 3 7.00

S3H1 1 8.90

S3H1 2 6.20

S3H1 3 7.60

S3H2 1 8.50

S3H2 2 6.20

S3H2 3 7.80

S3H3 1 9.00

S3H3 2 7.40

S3H3 3 7.70

;

proc glm;

class blok S H;

model BRIX = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model BRIX = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model BRIX = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model BRIX = plk;

means plk/HOVTEST=BARTLETT;

run;

**Lampiran 3. Kadar Gula Pereduksi**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok**  | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 16.27 | 20.44 | 36.49 | 73.20 | 24.40 |
| Sorgum 5 g, 15 hari | 20.10 | 19.74 | 30.80 | 70.64 | 23.55 |
| Sorgum 5 g, 20 hari | 17.90 | 18.02 | 25.89 | 61.80 | 20.60 |
| Sorgum 8 g, 10 hari | 12.21 | 10.78 | 19.11 | 42.11 | 14.04 |
| Sorgum 8 g, 15 hari | 10.07 | 10.67 | 22.38 | 43.11 | 14.37 |
| Sorgum 8 g, 20 hari | 10.92 | 10.61 | 21.33 | 42.86 | 14.29 |
| Sorgum 11 g, 10 hari | 10.79 | 8.13 | 13.18 | 32.10 | 10.70 |
| Sorgum 11 g, 15 hari | 10.35 | 8.47 | 13.62 | 32.43 | 10.81 |
| Sorgum 11 g, 20 hari | 10.87 | 7.91 | 11.51 | 30.29 | 10.10 |

Jumlah total : 428.54

Jumlah data : 27

Jumlah kelompok : 3

Jumlah kombinasi : 9

Faktor koreksi : 6802

KV : 19.32

**Editor uji DMRT pada parameter kadar gula pereduksi untuk SAS**

Data;

input plk$1-4S$1-2H$3-4 blok GULA;

SH = S||H;

cards;

S1H1 1 16.27

S1H1 2 20.44

S1H1 3 36.49

S1H2 1 20.10

S1H2 2 19.74

S1H2 3 30.80

S1H3 1 17.90

S1H3 2 18.02

S1H3 3 25.89

S2H1 1 12.21

S2H1 2 10.78

S2H1 3 19.11

S2H2 1 10.07

S2H2 2 10.67

S2H2 3 22.38

S2H3 1 10.92

S2H3 2 10.61

S2H3 3 21.33

S3H1 1 10.79

S3H1 2 8.13

S3H1 3 13.18

S3H2 1 10.35

S3H2 2 8.47

S3H2 3 13.62

S3H3 1 10.87

S3H3 2 7.91

S3H3 3 11.51

;

proc glm;

class blok S H;

model GULA = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model GULA = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model GULA = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model GULA = plk;

means plk/HOVTEST=BARTLETT;

run;

**Data setelah ditranformasi**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok** | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 5.03 | 5.52 | 7.04 | 17.59 | 5.86 |
| Sorgum 5 g, 15 hari | 5.48 | 5.44 | 5.55 | 16.47 | 5.49 |
| Sorgum 5 g, 20 hari | 5.23 | 5.25 | 6.09 | 16.57 | 5.52 |
| Sorgum 8 g, 10 hari | 4.94 | 4.28 | 5.37 | 14.59 | 4.86 |
| Sorgum 8 g, 15 hari | 4.17 | 4.27 | 5.37 | 13.81 | 4.60 |
| Sorgum 8 g, 20 hari | 4.30 | 4.26 | 5.62 | 14.18 | 4.73 |
| Sorgum 11 g, 10 hari | 4.28 | 3.85 | 4.63 | 12.76 | 4.25 |
| Sorgum 11 g, 15 hari | 4.22 | 3.91 | 4.69 | 12.82 | 4.27 |
| Sorgum 11 g, 20 hari | 4.30 | 3.81 | 4.39 | 12.50 | 4.17 |

Jumlah total : 131.29

Jumlah data : 27

Jumlah kelompok : 3

Jumlah perlakuan : 9

Faktor koreksi : 638

KV : 7.14

**Editor uji DMRT pada parameter kadar gula pereduksi untuk SAS (transformasi)**

Data;

input plk$1-4S$1-2H$3-4 blok GULA;

SH = S||H;

cards;

S1H1 1 5.033

S1H1 2 5.52

S1H1 3 7.04

S1H2 1 5.48

S1H2 2 5.44

S1H2 3 5.55

S1H3 1 5.23

S1H3 2 5.25

S1H3 3 6.09

S2H1 1 4.94

S2H1 2 4.28

S2H1 3 5.37

S2H2 1 4.17

S2H2 2 4.27

S2H2 3 5.37

S2H3 1 4.3

S2H3 2 4.26

S2H3 3 5.62

S3H1 1 4.28

S3H1 2 3.85

S3H1 3 4.63

S3H2 1 4.22

S3H2 2 3.91

S3H2 3 4.69

S3H3 1 4.3

S3H3 2 3.81

S3H3 3 4.39

;

proc glm;

class blok S H;

model GULA = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model GULA = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model GULA = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model GULA = plk;

means plk/HOVTEST=BARTLETT;

run;

**Lampiran 4. Kadar Abu**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok** | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 0.36 | 0.10 | 0.32 | 0.77 | 0.26 |
| Sorgum 5 g, 15 hari | 0.06 | 0.43 | 0.35 | 0.84 | 0.28 |
| Sorgum 5 g, 20 hari | 0.03 | 0.28 | 0.43 | 0.73 | 0.24 |
| Sorgum 8 g, 10 hari | 0.23 | 0.27 | 0.39 | 0.89 | 0.30 |
| Sorgum 8 g, 15 hari | 0.05 | 0.14 | 0.55 | 0.73 | 0.24 |
| Sorgum 8 g, 20 hari | 0.45 | 0.04 | 0.27 | 0.76 | 0.25 |
| Sorgum 11 g, 10 hari | 0.38 | 0.68 | 0.41 | 1.46 | 0.49 |
| Sorgum 11 g, 15 hari | 0.28 | 0.54 | 0.58 | 1.39 | 0.46 |
| Sorgum 11 g, 20 hari | 0.04 | 0.67 | 0.41 | 1.11 | 0.37 |

Jumlah total : 8,67

Jumlah data : 27

Jumlah kelompok : 3

Jumlah kombinasi : 9

Faktor koreksi : 2,78

KV : 57,27

**Editor uji DMRT pada parameter kadar abu untuk SAS**

Data;

input plk$1-4S$1-2H$3-4 blok ABU;

SH = S||H;

cards;

S1H1 1 0.36

S1H1 2 0.10

S1H1 3 0.32

S1H2 1 0.06

S1H2 2 0.43

S1H2 3 0.35

S1H3 1 0.03

S1H3 2 0.28

S1H3 3 0.43

S2H1 1 0.23

S2H1 2 0.27

S2H1 3 0.39

S2H2 1 0.05

S2H2 2 0.14

S2H2 3 0.55

S2H3 1 0.45

S2H3 2 0.04

S2H3 3 0.27

S3H1 1 0.38

S3H1 2 0.68

S3H1 3 0.41

S3H2 1 0.28

S3H2 2 0.54

S3H2 3 0.58

S3H3 1 0.04

S3H3 2 0.67

S3H3 3 0.41

;

proc glm;

class blok S H;

model ABU = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model ABU = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model ABU = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model ABU = plk;

means plk/HOVTEST=BARTLETT;

run;

**Data setelah ditranformasi**

|  |  |  |  |
| --- | --- | --- | --- |
| **Perlakuan** | **Kelompok**  | **Total** | **Rata-rata** |
| **1** | **2** | **3** |
| Sorgum 5 g, 10 hari | 1.60 | 1.32 | 1.57 | 4.49 | 1.50 |
| Sorgum 5 g, 15 hari | 1.77 | 1.66 | 1.59 | 5.02 | 1.67 |
| Sorgum 5 g, 20 hari | 1.17 | 1.53 | 1.66 | 4.36 | 1.45 |
| Sorgum 8 g, 10 hari | 1.48 | 1.52 | 1.63 | 4.63 | 1.54 |
| Sorgum 8 g, 15 hari | 1.22 | 1.37 | 1.74 | 4.33 | 1.44 |
| Sorgum 8 g, 20 hari | 1.67 | 1.20 | 1.52 | 4.39 | 1.46 |
| Sorgum 11 g, 10 hari | 1.62 | 1.82 | 1.64 | 5.08 | 1.69 |
| Sorgum 11 g, 15 hari | 1.53 | 1.73 | 1.76 | 5.02 | 1.67 |
| Sorgum 11 g, 20 hari | 1.20 | 1.82 | 1.64 | 4.66 | 1.55 |

Jumlah data : 41,98

Jumlah data : 27

Jumlah kelompok : 3

Jumlah kombinasi : 9

Faktor koreksi : 65,27

KV : 12,44

**Editor uji DMRT pada parameter kadar abu untuk SAS (transformasi)**

Data;

input plk$1-4S$1-2H$3-4 blok ABU;

SH = S||H;

cards;

S1H1 1 1.60

S1H1 2 1.32

S1H1 3 1.57

S1H2 1 1.77

S1H2 2 1.66

S1H2 3 1.59

S1H3 1 1.17

S1H3 2 1.53

S1H3 3 1.66

S2H1 1 1.48

S2H1 2 1.52

S2H1 3 1.63

S2H2 1 1.22

S2H2 2 1.37

S2H2 3 1.74

S2H3 1 1.67

S2H3 2 1.20

S2H3 3 1.52

S3H1 1 1.62

S3H1 2 1.82

S3H1 3 1.64

S3H2 1 1.53

S3H2 2 1.73

S3H2 3 1.76

S3H3 1 1.20

S3H3 2 1.82

S3H3 3 1.64

;

proc glm;

class blok S H;

model ABU = blok S H S\*H ;

test h = S\*H ;

means S H/duncan;

run;

proc glm;

class blok SH;

model ABU = blok SH;

means SH/duncan;

run;

proc glm;

class plk blok;

model ABU = blok plk;

means plk/duncan;

run;

proc glm;

class plk blok;

model ABU = plk;

means plk/HOVTEST=BARTLETT;

run;

**Lampiran 5. Perhitungan Rendemen Gula**

Rumus :

$$\% Rendemen=\frac{gula yang diperoleh}{bahan yang digunakan} x 100\% $$

Gula dalam penelitian ini sudah dihitung dalam bentuk persen, sehingga :

$$Rendemen gula bagas batang sorgum=\frac{14.37 \%}{8 gram}$$

 = 0.0180% per gram

 = 17.96% per kg

$$Rendemen gula ampas tebu=\frac{13.44 \%}{8 gram}$$

 = 0.0168% per gram

 = 16.8% per kg