Lampiran 1. Skema penanaman di rumah kasa

A1  A2  A3
B1  B2  B3
Lampiran 2. Prosedur menghitung kadar air kering udara

Adapun langkah – langkah yang dilakukan sebagai berikut :

b. Ditimbang 10 gr tanah kering udara dan dimasukkan ke dalam cawan.
c. Dimasukkan cawan ke dalam oven selama 5 jam pada suhu 105°C.
d. Kemudian dimasukkan ke dalam desikator pendingin lalu ditimbang dan akhirnya diperoleh data berat kering konstan.
e. Kemudian dihitung persentase kadar air kering udara dengan rumus

\[
\% \text{ KA} = \frac{\text{BTKU} - \text{BTKO}}{\text{BTKO}} \times 100\%
\]

Keterangan :
- BTKU : Berat tanah kering udara
- BTKO : Berat tanah kering diovenkan

Selanjutnya dilakukan pengukuran kadar air kapasitas lapang tanah untuk menentukan jumlah air yang akan diberikan pada tanaman. Prosedur pengukuran kadar air kapasitas lapang adalah sebagai berikut :

a. Disiapkan gelas ukur dengan ukuran 300 ml
b. Pasir dimasukkan kedalam gelas ukur sebanyak 1/3 dari gelas ukur.
c. Pipet plastik diletakkan di tengah – tengah gelas ukur diatas pasir.
d. Tanah kering udara dimasukkan ke dalam gelas ukur sebanyak 2/3 dari gelas ukur.
e. Dimasukkan air sedikit demi sedikit sampai batas permukaan pasir.
f. Gelas ukur ditutup dengan plastik dan diberi lubang pada pipet.
g. Dibiarkan selama 24 jam.
h. Diambil tanah pada bagian tengah sebanyak 10 gr kemudian diletakkan pada cawan timbang yang bersih dan kering.
i. Cawan timbang yang berisi 10 gram kemudian dimasukkan kedalam oven selama 24 jam pada suhu 105°C.
j. Dikeluarkan dari oven kemudian cawan beserta tanahnya diletakkan ke dalam desikator pendingin lalu ditimbang.
k. Dihitung kadar air tanah berdasarkan bobot kering oven dengan suhu 105°C dengan rumus sebagai berikut:

\[
\% \text{ KL} = \frac{\text{BTKL} - \text{BTKO}}{\text{BTKO}} \times 100\%
\]

Keterangan :
- BTKL : Berat tanah awal
- BTKO : Berat tanah setelah diovenkan
## Lampiran 3. Data tinggi tanaman sengon umur 4 minggu – 13 minggu

<table>
<thead>
<tr>
<th>Perlakuan</th>
<th>Ulangan</th>
<th>Pengamatan pada minggu ke-</th>
<th>............. cm .............</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>A (NPK)</td>
<td>1</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>B (A + 5 gr komp. trad)</td>
<td>1</td>
<td>4.0</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.0</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td>C (A + 10 gr komp. trad)</td>
<td>1</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.5</td>
<td>5.5</td>
</tr>
<tr>
<td>D (A + 15 gr komp. trad)</td>
<td>1</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>E (A + 20 gr komp. trad)</td>
<td>1</td>
<td>4.5</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.5</td>
<td>5.5</td>
</tr>
<tr>
<td>F (A + 5 gr komp.EM4)</td>
<td>1</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>G (A + 10 gr komp.EM4)</td>
<td>1</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>H (A + 15 gr komp.EM4)</td>
<td>1</td>
<td>4.5</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>I (A + 20 gr komp.EM4)</td>
<td>1</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

## Lampiran 4. Data analisis sidik ragam tinggi tanaman sengon umur 13 minggu

<table>
<thead>
<tr>
<th>Sidik keragaman</th>
<th>Derajat</th>
<th>Jumlah Kuadrat</th>
<th>Kuadrat Tengah</th>
<th>F.Hitung</th>
<th>5%</th>
<th>1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulangan</td>
<td>2</td>
<td>130.6667</td>
<td>65.33335</td>
<td>1.693762</td>
<td>3,63</td>
<td>6,23</td>
</tr>
<tr>
<td>Perlakuan</td>
<td>8</td>
<td>226.1667</td>
<td>28.27084</td>
<td>0.732919</td>
<td>2.59</td>
<td>3,89</td>
</tr>
<tr>
<td>Galat</td>
<td>16</td>
<td>617.1667</td>
<td>38.57292</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
\text{Koefisien keragaman (KK) } = \frac{38.57292}{21.5} = 0.28
\]
Lampiran 5. Data diameter tanaman sengon umur 4 minggu – 13 minggu

<table>
<thead>
<tr>
<th>Perlakuan</th>
<th>Ulangan</th>
<th>Pengamatan pada minggu ke-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A (NPK)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B (A + 5 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C (A + 10 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D (A + 15 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E (A + 20 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F (A + 5 gr komp. EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G (A + 10 gr komp. EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H (A + 15 gr komp. EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (A + 20 gr komp. EM4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lampiran 6. Data analisis sidik ragam diameter tanaman sengon umur 13 minggu

<table>
<thead>
<tr>
<th>Sumber Keragaman</th>
<th>Derajat bebas</th>
<th>Jumlah Kuadrat</th>
<th>Kuadrat tengah</th>
<th>F.Hitung</th>
<th>F.tabel 5%</th>
<th>F.tabel 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulangan</td>
<td>2</td>
<td>0.022822</td>
<td>0.011411</td>
<td>2.09429</td>
<td>3.63</td>
<td>3.23</td>
</tr>
<tr>
<td>Perlakuan</td>
<td>8</td>
<td>0.065867</td>
<td>0.008233</td>
<td>1.511092</td>
<td>2.59</td>
<td>3.89</td>
</tr>
<tr>
<td>Galat</td>
<td>16</td>
<td>0.087178</td>
<td>0.005449</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>0.175867</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Koefisien keragaman (KK) = 0.07382
0.328
= 0,22

Universitas Sumatera Utara
### Lampiran 7. Data jumlah anak daun tanaman sengon umur 4 minggu – 13 minggu

<table>
<thead>
<tr>
<th>Perlakuan</th>
<th>Ulangan</th>
<th>Pengamatan pada minggu ke-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>helai</td>
<td>helai</td>
</tr>
<tr>
<td>A (NPK)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>B (A + 5 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>C (A + 10 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>D (A + 15 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>E (A + 20 gr komp. trad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>F (A + 5 gr komp.EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>G (A + 10 gr komp.EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>H (A + 15 gr komp.EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>I (A + 20 gr komp.EM4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

### Lampiran 8. Data analisis jumlah anak daun tanaman sengon umur 13 minggu

<table>
<thead>
<tr>
<th>Sumber keragaman</th>
<th>Derajat bebas</th>
<th>Jumlah Kuadrat</th>
<th>Kuadrat tengah</th>
<th>F.hitung</th>
<th>F.tabel 5%</th>
<th>F.tabel 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulangan</td>
<td>2</td>
<td>783,1852</td>
<td>391,5926</td>
<td>1,527366</td>
<td>3,63</td>
<td>6,23</td>
</tr>
<tr>
<td>Perlakuan</td>
<td>8</td>
<td>1626,296</td>
<td>203,287</td>
<td>0,7929</td>
<td>2,59</td>
<td>3,89</td>
</tr>
<tr>
<td>Galat</td>
<td>16</td>
<td>4102,148</td>
<td>256,3843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>6511,63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Koefisien keragaman (KK) = \( \frac{16,01200}{60,296} = 0,26 \)
Lampiran 9. Hasil analisis tanah

<table>
<thead>
<tr>
<th>Karakteristik tanah</th>
<th>Satuan</th>
<th>nilai</th>
<th>kriteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH H₂O</td>
<td>-</td>
<td>4,65</td>
<td>Rendah</td>
</tr>
<tr>
<td>C-Organik</td>
<td>%</td>
<td>0,30</td>
<td></td>
</tr>
<tr>
<td>N-Total</td>
<td>%</td>
<td>0,07</td>
<td>Rendah</td>
</tr>
<tr>
<td>C/N</td>
<td>-</td>
<td>4,29</td>
<td>Rendah</td>
</tr>
<tr>
<td>P tersedia</td>
<td>Ppm</td>
<td>8,55</td>
<td></td>
</tr>
<tr>
<td>K-dd</td>
<td>Me/100gr</td>
<td>0,11</td>
<td></td>
</tr>
<tr>
<td>KTK</td>
<td>Me/100gr</td>
<td>10,16</td>
<td>Rendah</td>
</tr>
<tr>
<td>Al-dd</td>
<td>Me/100gr</td>
<td>0,78</td>
<td></td>
</tr>
</tbody>
</table>

Lampiran 10. Data komposisi  Effective Microorganisms 4 (EM4)

<table>
<thead>
<tr>
<th>Komposisi</th>
<th>Nilai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactobacillus</td>
<td>8,7 X 10⁵</td>
</tr>
<tr>
<td>Bakteri pelarut Fospat</td>
<td>7,5 X 10⁶</td>
</tr>
<tr>
<td>Yeast / ragi</td>
<td>8,5 X 10⁶</td>
</tr>
<tr>
<td>Actinomycetes</td>
<td>+</td>
</tr>
<tr>
<td>Bakteri fotosintetik</td>
<td>+</td>
</tr>
<tr>
<td>Calsium (Ca)</td>
<td>1.675 ppm</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>597 ppm</td>
</tr>
<tr>
<td>Besi (Fe)</td>
<td>5.54ppm</td>
</tr>
<tr>
<td>Aluminium (Al)</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>1.90ppm</td>
</tr>
<tr>
<td>Cooper (Cu)</td>
<td>0,01ppm</td>
</tr>
<tr>
<td>Mangan (Mn)</td>
<td>3.29ppm</td>
</tr>
<tr>
<td>Sodium (Na)</td>
<td>363 ppm</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Nitrogen (N)</td>
<td>0.07ppm</td>
</tr>
<tr>
<td>Nickel (Ni)</td>
<td>0.92ppm</td>
</tr>
<tr>
<td>Kalium (K)</td>
<td>7.675 ppm</td>
</tr>
<tr>
<td>Phosphor (P)</td>
<td>3.22ppm</td>
</tr>
<tr>
<td>Clorida (Cl)</td>
<td>444.35ppm</td>
</tr>
<tr>
<td>C organik (C)</td>
<td>27.05ppm</td>
</tr>
<tr>
<td>pH</td>
<td>3.9 ppm</td>
</tr>
</tbody>
</table>

Lab. Fak.MIPA IPB Bogor,2006
Lab. EMRO INC,Japan 2007
Lampiran 11. Data analisis bobot kering akar dan bobot kering tajuk

Bobot kering tajuk

<table>
<thead>
<tr>
<th>Sumber keragaman</th>
<th>Derajat bebas</th>
<th>Jumlah kuadrat</th>
<th>Kuadrat tengah</th>
<th>F.hitung</th>
<th>F. tabel 1%</th>
<th>F. tabel 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulangan</td>
<td>2</td>
<td>4.055556</td>
<td>2.027778</td>
<td>0.713727</td>
<td>3.63</td>
<td>6.23</td>
</tr>
<tr>
<td>Perlakuan</td>
<td>8</td>
<td>33.93333</td>
<td>4.241666</td>
<td>1.49296</td>
<td>2.59</td>
<td>3.89</td>
</tr>
<tr>
<td>Galat</td>
<td>16</td>
<td>45.45778</td>
<td>2.841111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Koefisien keragaman (KK) = \( \frac{1.685}{6.35} \)

\[ = 0.26 \]

Bobot kering akar

<table>
<thead>
<tr>
<th>Sumber Keragaman</th>
<th>Derajat Bebas</th>
<th>Jumlah Kuadrat</th>
<th>Kuadrat Tengah</th>
<th>F.hitung</th>
<th>F. tabel 1%</th>
<th>F. tabel 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulangan</td>
<td>2</td>
<td>0.482963</td>
<td>0.241482</td>
<td>0.747278</td>
<td>3.63</td>
<td>6.23</td>
</tr>
<tr>
<td>Perlakuan</td>
<td>8</td>
<td>6.556296</td>
<td>0.819537</td>
<td>2.536103</td>
<td>2.59</td>
<td>3.89</td>
</tr>
<tr>
<td>Galat</td>
<td>16</td>
<td>5.17037</td>
<td>0.323148</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Koefisien Keragaman (KK) = \( \frac{0.5685}{1.396} \)

\[ = 0.40 \]