**Lampiran 12.** Perhitungan Karakterisasi Simplisia dan Ekstrak Induk Kunyit

1. **Penetapan Kadar Air**

Kadar Air = $\frac{\left(Volume Akhir Air-Volume Awal Air\right)ml}{Bobot Simplisia} x 100\%$

* Sampel 1

Berat Sampel = 5 gr

Volume I = 0,8 ml

Volume II = 1 ml

Kadar Air = $\frac{\left(1-0,8\right)}{5} x 100\%$ = 4%

* Sampel 2

Berat Sampel = 5 gr

Volume I = 0,8 ml

Volume II = 1,2 ml

Kadar Air = $\frac{\left(1,2-0,8\right)}{5} x 100\%$ = 8%

* Sampel 3

Berat Sampel = 5 gr

Volume I = 1,2 ml

Volume II = 1 ml

Kadar Air = $\frac{\left(1,2-1\right)}{5} x 100\%$ = 4%

Maka, kadar air rata-rata = $\frac{4\%+8\%+4\%}{3}$ = 5,33%

**Lampiran 12.** (Lanjutan)

1. **Penetapan kadar Sari Larut Dalam Air**

Kadar Sari Larut Air = $\frac{Berat Sari Larut Air (g)}{Bobot Sampel (g)} x pengenceran x 100\%$

* Sampel 1

Berat Sampel = 5 gr

Berat Sari Larut Air = 0,23 gr

Kadar Sari Larut Air = $\frac{\left(0,23\right)}{5} x 5 x 100\%$ = 23%

* Sampel 2

Berat Sampel = 5 gr

Berat Sari Larut Air = 0,22 gr

Kadar Sari Larut Air = $\frac{\left(0,22\right)}{5} x 5 x 100\%$ = 22%

* Sampel 3

Berat Sampel = 5 gr

Berat Sari Larut Air = 0,26 gr

Kadar Sari Larut Air = $\frac{\left(0,26\right)}{5} x 5 x 100\%$ = 26%

Maka, kadar sari larut air rata-rata = $\frac{23\%+22\%+26\%}{3}$ = 23,6%

**Lampiran 12.** (Lanjutan)

1. **Penetapan Kadar Sari Larut Dalam Etanol**

Kadar Sari Larut Etanol = $\frac{Berat Sari Larut Etanol (g)}{Bobot Sampel (g)} x pengenceran x 100\%$

* Sampel 1

Berat Sampel = 5 gr

Berat Sari Larut Etanol = 0,09 gr

Kadar Sari Larut Etanol = $\frac{\left(0,09\right)}{5} x 10 x 100\%$ = 18%

* Sampel 2

Berat Sampel = 5 gr

Berat Sari Larut Etanol = 0,1 gr

Kadar Sari Larut Etanol = $\frac{\left(0,1\right)}{5} x 10 x 100\%$ = 20%

* Sampel 3

Berat Sampel = 5 gr

Berat Sari Larut Etanol = 0,08 gr

Kadar Sari Larut Etanol = $\frac{\left(0,08\right)}{5} x 10 x 100\%$ = 16%

Maka, kadar sari larut etanol rata-rata = $\frac{18\%+20\%+16\%}{3}$ = 18%

**Lampiran 12.** (Lanjutan)

1. **Penetapan Kadar Abu Total**

Kadar Abu Total = $\frac{Berat Abu (g)}{Bobot Sampel (g)} x 100\%$

* Sampel 1

Berat Sampel = 2 gr

Berat Abu = 0,11 gr

Kadar Abu Total = $\frac{\left(0,11\right)}{2} x 100\%$ = 5,5%

* Sampel 2

Berat Sampel = 2 gr

Berat Abu = 0,1 gr

Kadar Abu Total = $\frac{\left(0,1\right)}{2} x 100\%$ = 5%

* Sampel 3

Berat Sampel = 2 gr

Berat Abu = 0,13 gr

Kadar Abu Total = $\frac{\left(0,13\right)}{2} x 100\%$ = 6,5%

Maka, kadar abu total rata-rata = $\frac{5,5\%+5\%+6,5\%}{3}$ = 5,667%

**Lampiran 12.** (Lanjutan)

1. **Penetapan Kadar Abu Tidak Larut Dalam Asam**

Kadar Abu Larut Asam = $\frac{Berat Abu Larut Asam (g)}{Bobot Sampel (g)} x 100\%$

* Sampel 1

Berat Sampel = 2 gr

Berat Abu Larut Asam = 0,01 gr

Kadar Abu Larut Asam = $\frac{\left(0,01\right)}{2} x 100\%$ = 0,5%

* Sampel 2

Berat Sampel = 2 gr

Berat Abu Larut Asam = 0,012 gr

Kadar Abu Larut Asam = $\frac{\left(0,012\right)}{2} x 100\%$ = 0,6%

* Sampel 3

Berat Sampel = 2 gr

Berat Abu Larut Asam = 0,015 gr

Kadar Abu Larut Asam = $\frac{\left(0,015\right)}{2} x 100\%$ = 0,75%

Maka, kadar abu larut asam rata-rata = $\frac{0,5\%+0,6\%+0,75\%}{3}$ = 0,62%