**Lampiran 1.** Hasil Identifikasi Wortel (*Daucus carota* L.)



63

**Lampiran 2.** Bagan Alir Pembuatan Sari Wortel (*Daucus carota* L.)

Wortel (*Daucus carota* L.)

Dikupas dan dibersihkan dengan air mengalir

Ditimbang 1,5 kg

Diparut dan disaring

Sari Wortel (*Daucus carota* L.)

Dimasukkan kedalam oven pada suhu 60oC selama ± 3 jam

Sari kental

Skrining Fitokimia

1. Alkaloid
2. Flavonoid
3. Saponin
4. Tanin
5. Steroid/triterpenoid
6. Glikosida

**Lampiran 3.** Bagan Alir Pembuatan Sediaan *Gummy candies* Sari Wortel (*Daucus carota* L.)

Manitol + Sirup jagung

Gom arab + Aquadest panas

Dipanaskan

Aduk ad larut

Minyak jagung

Gelatin aktif

Aduk ad homogen

Sari Wortel

Dipanaskan

Sukrosa

Essens

Laktosa

Aduk ad homogen

Pencetakan *Gummy candies*

Evaluasi

1. Organoleptis
2. pH
3. Keseragaman Bobot
4. Stabilitas
5. Elastisitas
6. Hedonik

**Lampiran 4.** Pembuatan Sediaan *Gummy Candies*  SariWortel (*Daucus carota* L.)



Wortel yang sudah diparut

Wortel (*Daucus carota* L.)



Sari wortel kental

Sari wortel segar



Dimasukkan dalam cetakan

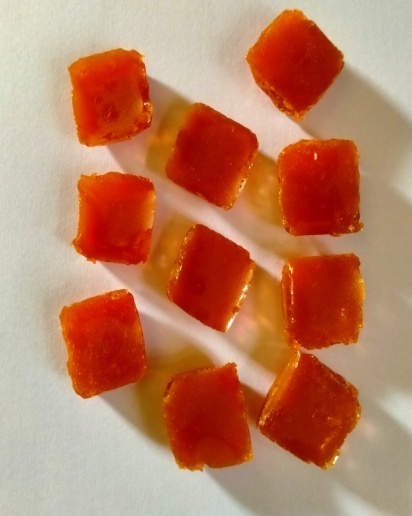
Bahan sediaan *gummy candies* ditambahkan sari

**Lampiran 5.** Hasil Sediaan *Gummy Candies* Sari Wortel (*Daucus carota* L.)



Formulasi 2

Formula 1

****

Formula 4

Formulasi 3

****

****

Formula 6

Formulasi 5

**Lampiran 6.** Hasil uji keseragaman bobot *gummy candies*

1. Uji keseraman bobot *gummy candies* formula 1 dengan perbandingan (manitol 50% : gelatin 50%).

Berat 10 gummy candies = 1,12 gram / 10 = 0,112 gram = 112 mg

SD = x - xi

= 112 – 110 = 2 mg

SD = x - xi

= 112 – 100 = 12 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 2,67 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 1 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

**Lampiran 6.** (Lanjutan)

1. Uji keseraman bobot *gummy candies* formula 2 dengan perbandingan (manitol 40% : gelatin 60%).

Berat 10 gummy candies = 1,06 gram / 10 = 0,106 gram = 106 mg

SD = x - xi

= 106 – 100 = 6 mg

SD = x - xi

= 106 – 110 = -4 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 1,88 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 2 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

**Lampiran 6.** (Lanjutan)

1. Uji keseraman bobot *gummy candies* formula 3 dengan perbandingan (manitol 25% : gelatin 75%).

Berat 10 gummy candies = 1,05 gram / 10 = 0,105 gram = 105 mg

SD = x - xi

= 105 – 110 = -5 mg

SD = x - xi

= 105 – 100 = 5 mg

SD = x - xi

= 105 – 108 = -3 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 1,14 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

**Lampiran 6.** (Lanjutan)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 3 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

1. Uji keseraman bobot *gummy candies* formula 4 dengan perbandingan (manitol 60% : gelatin 40%).

Berat 10 gummy candies = 1,02 gram / 10 = 0,102 gram = 102 mg

SD = x - xi

= 102 – 90 = 12 mg

SD = x - xi

= 102 – 100 = 2 mg

SD = x - xi

= 102 – 101 = 1 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 4,70 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

**Lampiran 6.** (Lanjutan)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 4 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

1. Uji keseraman bobot *gummy candies* formula 5 dengan perbandingan (manitol 75% : gelatin 25%).

Berat 10 gummy candies = 1,08 gram / 10 = 0,108 gram = 108 mg

SD = x - xi

= 108 – 106 = 2 mg

SD = x - xi

= 108 – 107 = 1 mg

SD = x - xi

= 108 – 110 = -2 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 1,11 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

**Lampiran 6.** (Lanjutan)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 5 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

1. Uji keseraman bobot *gummy candies* blanko tanpa essen dengan perbandingan (manitol 50% : gelatin 50%).

Berat 10 gummy candies = 1,03 gram / 10 = 0,103 gram = 103 mg

SD = x - xi

= 103 – 101 = 2 mg

SD = x - xi

= 103 – 102 = 1 mg

SD = x - xi

= 103 – 106 = -3 mg

Ket:

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

xi = Berat 1 gummy (dalam mg)

CV =

=

= 1,35 %

Ket:

CV = Koefisiensi Variasi

SD = Standar Deviasi

x = Rata-rata berat 10 gummy candies (dalam mg)

**Lampiran 6.** (Lanjutan)

Jadi, hasil keseragaman bobot *gummy candies* berdasarkan nilai CV pada formula 6 memenuhi persyaratan karena tidak menyimpang dari kolom A, yaitu tidak lebih dari 10%.

**Lampiran 7.** Soal Uji Hedonik Mohon kesediaan saudara/teman-teman untuk mengisikan jawabannya sesuai pendapatnya.

Nama :

Umur :

1. Perhatikan **Rasa** dari masing-masing formula dan mohon beri jawaban pada pertanyaan.
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “Formula I ” ini
2. TM b. M c. SM
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “ Formula II” ini
3. TM b. M c. SM
   * + - 1. Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “ Formula III” ini
4. TM b. M c. SM
   * + - 1. Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “ Formula IV” ini
5. TM b. M c. SM

Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “ Formula V” ini

* + - * 1. TM b. M c. SM

Bagaimana penilaian saudara/teman-teman mengenai **Rasa** dari sediaan *Gummy candies* “Blanko Tanpa Essen” ini

* + - * 1. TM b. M c. SM

Keterangan :

TM = Tidak Manis

M = Manis

SM = Sangat Manis

**Lampiran 7.** (Lanjutan)

1. Perhatikan **Kekenyalan** dari masing-masing formula dan mohon beri jawaban pada pertanyaan.
   * + 1. Bagaimana penilaian saudara/teman teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “Formula I” ini
          1. TK b. K c. SK
       2. Bagaimana penilaian saudara/teman-teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “ Formula II” ini
          1. TK b. K c. SK
       3. Bagaimana penilaian saudara/teman-teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “ Formula III” ini
          1. TK b. K c. SK
       4. Bagaimana penilaian saudara/teman-teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “ Formula IV” ini
          1. TK b. K c. SK
       5. Bagaimana penilaian saudara/teman-teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “ Formula V” ini
          1. TK b. K c. SK
       6. Bagaimana penilaian saudara/teman-teman mengenai **Kekenyalan** dari sediaan *Gummy candies* “Blanko Tanpa Essen” ini
          1. TK b. K c. SK

Keterangan :

TK = Tidak Kenyal

K = Kenyal

SK = Sangat Kenyal

**Lampiran 7.** (Lanjutan)

1. Perhatikan **Kesukaan** dari masing-masing formula dan mohon beri jawaban pada pertanyaan.
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “Formula I” ini
2. TS b. S c. SS
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “ Formula II” ini
3. TS b. S c. SS
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “ Formula III” ini
4. TS b. S c. SS
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “ Formula IV” ini
5. TS b. S c. SS
   * + 1. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “ Formula V” ini
          1. TS b. S c. SS
       2. Bagaimana penilaian saudara/teman-teman mengenai **Kesukaan** dari sediaan *Gummy candies* “Blanko Tanpa Essen” ini
          1. TS b. S c. SS

Keterangan :

TS = TidakSuka

S = Suka

SS = SangatSuka

**Lampiran 8.** Hasil Uji ANOVA Elastisitas Sediaan *Gummy Candies*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normalityb** | | | | | | | |
|  | Formula | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| Pengukuran | Pasaran | .253 | 3 | . | .964 | 3 | .637 |
| Formula 1 | .349 | 3 | . | .832 | 3 | .194 |
| Formula 2 | .292 | 3 | . | .923 | 3 | .463 |
| Formula 3 | .219 | 3 | . | .987 | 3 | .780 |
| Formula 4 | .175 | 3 | . | 1.000 | 3 | 1.000 |
| a. Lilliefors Significance Correction | | | | | | | |
| b. Pengukuran is constant when Formula = Formula 5. It has been omitted. | | | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
| Pengukuran | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 13.244 | 5 | 2.649 | 41.461 | .000 |
| Within Groups | .767 | 12 | .064 |  |  |
| Total | 14.011 | 17 |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Pengukuran** | | | | | | |
| Tukey HSDa | | | | | | |
| Formula | N | Subset for alpha = 0.05 | | | | |
| 1 | 2 | 3 | 4 | 5 |
| Formula 4 | 3 | 1.600 |  |  |  |  |
| Formula 5 | 3 | 2.100 | 2.100 |  |  |  |
| Formula 1 | 3 |  | 2.667 | 2.667 |  |  |
| Formula 2 | 3 |  |  | 3.133 | 3.133 |  |
| Formula 3 | 3 |  |  |  | 3.733 | 3.733 |
| Pasaran | 3 |  |  |  |  | 4.033 |
| Sig. |  | .223 | .136 | .280 | .105 | .697 |
| Means for groups in homogeneous subsets are displayed. | | | | | | |
| a. Uses Harmonic Mean Sample Size = 3.000. | | | | | | |

**Lampiran 9.** Hasil Uji ANOVA Hedonik (kesukaan) Sediaan *Gummy Candies*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | | |
|  | Formula | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| Rasa | Formula 1 | .292 | 3 | . | .923 | 3 | .463 |
| Formula 2 | .253 | 3 | . | .964 | 3 | .637 |
| Formula 3 | .349 | 3 | . | .832 | 3 | .194 |
| Formula 4 | .292 | 3 | . | .923 | 3 | .463 |
| Formula 5 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 6 | .204 | 3 | . | .993 | 3 | .843 |
| Kekenyalan | Formula 1 | .349 | 3 | . | .832 | 3 | .194 |
| Formula 2 | .292 | 3 | . | .923 | 3 | .463 |
| Formula 3 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 4 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 5 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 6 | .292 | 3 | . | .923 | 3 | .463 |
| Suka | Formula 1 | .204 | 3 | . | .993 | 3 | .843 |
| Formula 2 | .253 | 3 | . | .964 | 3 | .637 |
| Formula 3 | .328 | 3 | . | .871 | 3 | .298 |
| Formula 4 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 5 | .385 | 3 | . | .750 | 3 | .000 |
| Formula 6 | .349 | 3 | . | .832 | 3 | .194 |
| a. Lilliefors Significance Correction | | | | | | | |

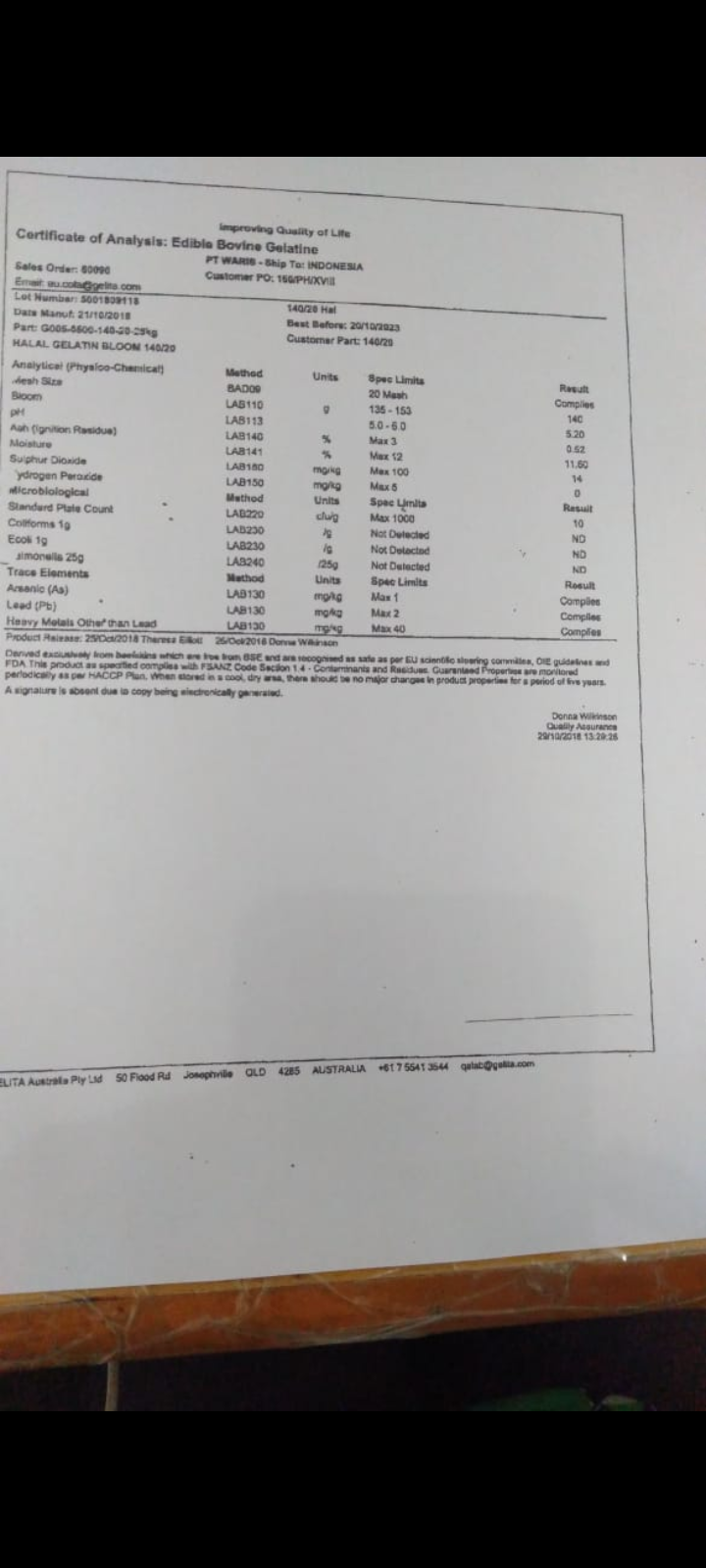
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | | |
|  | | Sum of Squares | df | Mean Square | F | Sig. |
| Rasa | Between Groups | .000 | 5 | .000 | .000 | 1.000 |
| Within Groups | 228.000 | 12 | 19.000 |  |  |
| Total | 228.000 | 17 |  |  |  |
| Kekenyalan | Between Groups | .000 | 5 | .000 | .000 | 1.000 |
| Within Groups | 268.000 | 12 | 22.333 |  |  |
| Total | 268.000 | 17 |  |  |  |
| Suka | Between Groups | .000 | 5 | .000 | .000 | 1.000 |
| Within Groups | 246.000 | 12 | 20.500 |  |  |
| Total | 246.000 | 17 |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Rasa** | | |
| Tukey HSDa | | |
| Formula | N | Subset for alpha = 0.05 |
| 1 |
| Formula 1 | 3 | 3.333 |
| Formula 2 | 3 | 3.333 |
| Formula 3 | 3 | 3.333 |
| Formula 4 | 3 | 3.333 |
| Formula 5 | 3 | 3.333 |
| Formula 6 | 3 | 3.333 |
| Sig. |  | 1.000 |
| Means for groups in homogeneous subsets are displayed. | | |
| a. Uses Harmonic Mean Sample Size = 3.000. | | |

|  |  |  |
| --- | --- | --- |
| **Kekenyalan** | | |
| Tukey HSDa | | |
| Formula | N | Subset for alpha = 0.05 |
| 1 |
| Formula 1 | 3 | 3.333 |
| Formula 2 | 3 | 3.333 |
| Formula 3 | 3 | 3.333 |
| Formula 4 | 3 | 3.333 |
| Formula 5 | 3 | 3.333 |
| Formula 6 | 3 | 3.333 |
| Sig. |  | 1.000 |
| Means for groups in homogeneous subsets are displayed. | | |
| a. Uses Harmonic Mean Sample Size = 3.000. | | |

|  |  |  |
| --- | --- | --- |
| **Suka** | | |
| Tukey HSDa | | |
| Formula | N | Subset for alpha = 0.05 |
| 1 |
| Formula 1 | 3 | 3.333 |
| Formula 2 | 3 | 3.333 |
| Formula 3 | 3 | 3.333 |
| Formula 4 | 3 | 3.333 |
| Formula 5 | 3 | 3.333 |
| Formula 6 | 3 | 3.333 |
| Sig. |  | 1.000 |
| Means for groups in homogeneous subsets are displayed. | | |
| a. Uses Harmonic Mean Sample Size = 3.000. | | |

**Lampiran 10.** Sertifikat Gelatin Halal (*Food Grade*)



**Lampiran 11.** Sertifikat Gom Arab

****

**Lampiran 12.** Sertifika Laktosa

