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## LAMPIRAN

Lampiran 1. Hasil pengamatan tingkat preferensi lebah terhadap pakan tambahan campuran infus daun kelor dan sirup

| No. | Bulan | Koloni | Per-lakuan | Minggu | Ulangan | Pakan yang dikonsumsi (g) | Percentase pakan Yang Dikonsumsi (%) |  |
|-----|-------|--------|------------|--------|---------|---------------------------|--------------------------------------|--|
|     |       |        |            |        |         |                           |                                      |  |
| 1   | 1     | 1      | A          | 1      | 1       | 150                       | 100                                  |  |
| 2   |       |        |            |        | 2       | 150                       | 100                                  |  |
| 3   |       |        |            |        | 3       | 150                       | 100                                  |  |
| 4   |       |        |            | 2      | 1       | 150                       | 100                                  |  |
| 5   |       |        |            |        | 2       | 150                       | 100                                  |  |
| 6   |       |        |            |        | 3       | 150                       | 100                                  |  |
| 7   |       |        |            | 3      | 1       | 150                       | 100                                  |  |
| 8   |       |        |            |        | 2       | 150                       | 100                                  |  |
| 9   |       |        |            |        | 3       | 150                       | 100                                  |  |
| 10  |       | 2      | B          | 1      | 1       | 28,70                     | 19,13                                |  |
| 11  |       |        |            |        | 2       | 47,90                     | 31,93                                |  |
| 12  |       |        |            |        | 3       | 123,3                     | 82,2                                 |  |
| 13  |       |        |            | 2      | 1       | 57,10                     | 38,06                                |  |
| 14  |       |        |            |        | 2       | 61,20                     | 40,8                                 |  |
| 15  |       |        |            |        | 3       | 32,10                     | 21,4                                 |  |
| 16  |       |        |            | 3      | 1       | 48,80                     | 32,53                                |  |
| 17  |       |        |            |        | 2       | 150                       | 100                                  |  |
| 18  |       |        |            |        | 3       | 84,40                     | 56,26                                |  |
| 19  | 2     | 1      | B          | 1      | 1       | 150                       | 100                                  |  |
| 20  |       |        |            |        | 2       | 150                       | 100                                  |  |
| 21  |       |        |            |        | 3       | 150                       | 100                                  |  |
| 22  |       |        |            | 2      | 1       | 150                       | 100                                  |  |
| 23  |       |        |            |        | 2       | 150                       | 100                                  |  |
| 24  |       |        |            |        | 3       | 150                       | 100                                  |  |
| 25  |       |        |            | 3      | 1       | 150                       | 100                                  |  |
| 26  |       |        |            |        | 2       | 150                       | 100                                  |  |
| 27  |       |        |            |        | 3       | 150                       | 100                                  |  |
| 28  |       | 2      | C          | 1      | 1       | 150                       | 100                                  |  |
| 29  |       |        |            |        | 2       | 132,30                    | 88,2                                 |  |
| 30  |       |        |            |        | 3       | 150                       | 100                                  |  |
| 31  |       |        |            | 2      | 1       | 150                       | 100                                  |  |
|     |       |        |            |        | 2       | 133,60                    | 89,06                                |  |
|     |       |        |            |        | 3       | 136,30                    | 90,86                                |  |
|     |       |        |            | 3      | 1       | 125,70                    | 83,8                                 |  |
|     |       |        |            |        | 2       | 113,08                    | 75,38                                |  |
|     |       |        |            |        | 3       | 101,94                    | 67,96                                |  |



Lanjutan lampiran 1.

| No. | Bulan | Koloni | Perlakuan | Minggu | Ulangan | Pakan Yang dikonsums (g) | Persentase pakan Yang Dikonsumsi (%) |
|-----|-------|--------|-----------|--------|---------|--------------------------|--------------------------------------|
| 37  | 3     | 1      | C         | 1      | 1       | 150                      | 100                                  |
| 38  |       |        |           |        | 2       | 150                      | 100                                  |
| 39  |       |        |           |        | 3       | 150                      | 100                                  |
| 40  |       |        |           | 2      | 1       | 150                      | 100                                  |
| 41  |       |        |           |        | 2       | 150                      | 100                                  |
| 42  |       |        |           |        | 3       | 150                      | 100                                  |
| 43  |       |        |           | 3      | 1       | 150                      | 100                                  |
| 44  |       |        |           |        | 2       | 150                      | 100                                  |
| 45  |       |        |           |        | 3       | 150                      | 100                                  |
| 46  |       | 2      | D         | 1      | 1       | 150                      | 100                                  |
| 47  |       |        |           |        | 2       | 150                      | 100                                  |
| 48  |       |        |           |        | 3       | 28,08                    | 18,72                                |
| 49  |       |        |           | 2      | 1       | 111,22                   | 74,14                                |
| 50  |       |        |           |        | 2       | 102,09                   | 68,06                                |
| 51  |       |        |           |        | 3       | 108,58                   | 72,38                                |
| 52  |       |        |           | 3      | 1       | 99                       | 66                                   |
| 53  |       |        |           |        | 2       | 98,16                    | 65,44                                |
| 54  |       |        |           |        | 3       | 94,28                    | 62,85                                |
| 55  | 4     | 1      | D         | 1      | 1       | 150                      | 100                                  |
| 56  |       |        |           |        | 2       | 150                      | 100                                  |
| 57  |       |        |           |        | 3       | 150                      | 100                                  |
| 58  |       |        |           | 2      | 1       | 150                      | 100                                  |
| 59  |       |        |           |        | 2       | 150                      | 100                                  |
| 60  |       |        |           |        | 3       | 150                      | 100                                  |
| 61  |       |        |           | 3      | 1       | 150                      | 100                                  |
| 62  |       |        |           |        | 2       | 150                      | 100                                  |
| 63  |       |        |           |        | 3       | 150                      | 100                                  |
| 64  |       | 2      | A         | 1      | 1       | 150                      | 100                                  |
| 65  |       |        |           |        | 2       | 149,77                   | 99,84                                |
| 66  |       |        |           |        | 3       | 63,38                    | 42,25                                |
| 67  |       |        |           | 2      | 1       | 110,36                   | 73,57                                |
| 68  |       |        |           |        | 2       | 124,86                   | 83,24                                |
| 69  |       |        |           |        | 3       | 149,79                   | 99,86                                |
|     |       |        |           | 3      | 1       | 149,73                   | 99,82                                |
|     |       |        |           |        | 2       | 149,90                   | 99,93                                |
|     |       |        |           |        | 3       | 149,52                   | 99,68                                |



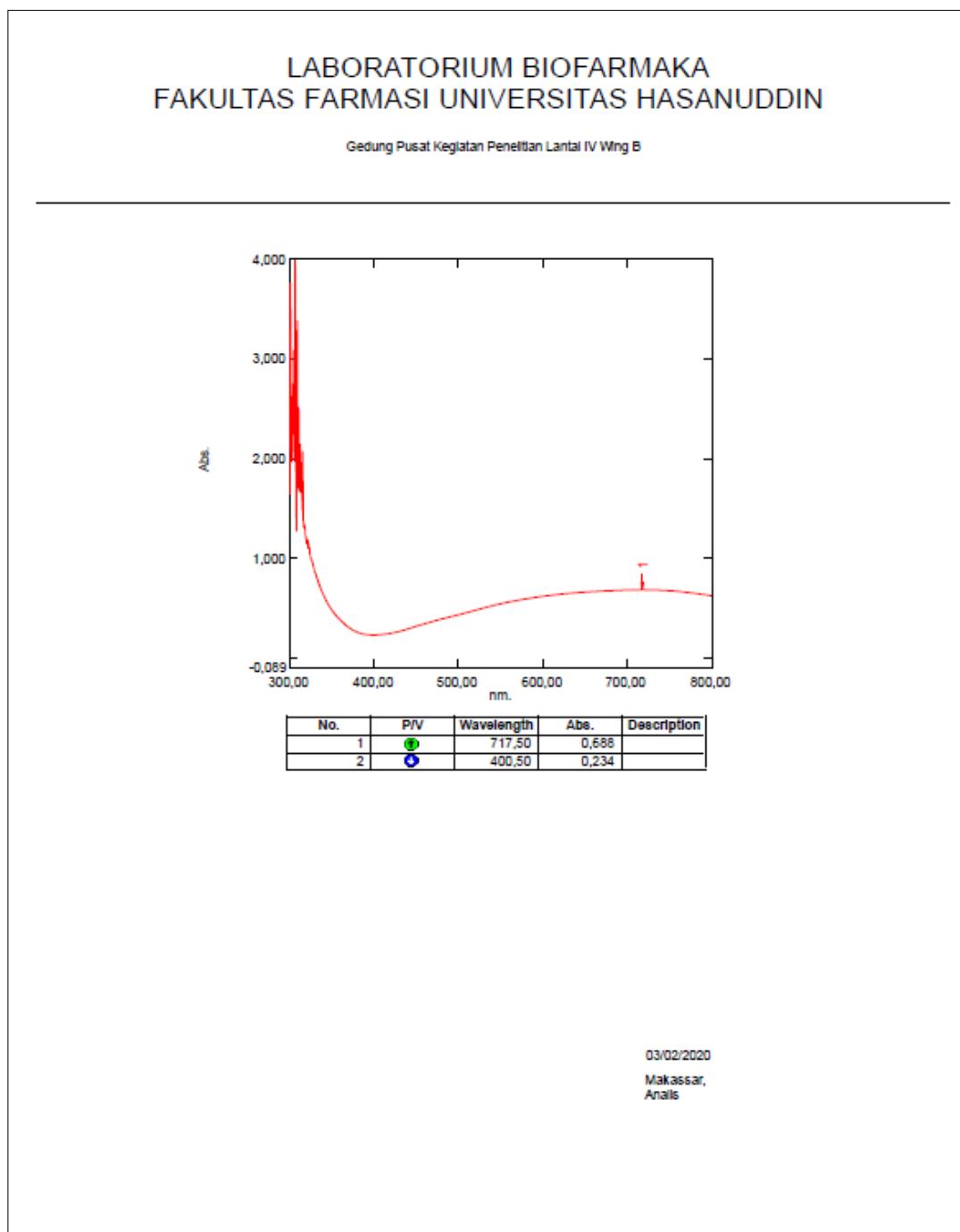
Lampiran 2. Analisis Ragam Preferensi Lebah terhadap Pakan Tambahan

| Sumber Keragaman | Derajat Bebas | Jumlah Kuadrat | Kuadrat Tengah | F      | Sig.  |
|------------------|---------------|----------------|----------------|--------|-------|
| Koloni           | 1             | 15575,415      | 15575,415      | 30,838 | 0,000 |
| Perlakuan        | 3             | 3366,736       | 1122,245       | 2,222  | 0,096 |
| Galat (Error)    | 55            | 27779,146      | 505,075        |        |       |
| Total            | 59            | 44932,386      |                |        |       |



Lampiran 3. Hasil pemeriksaan organoleptik MK oleh responden

| No. | Responden | Organoleptik | MK A        | MK B                     | MK C                     | MK D                     |
|-----|-----------|--------------|-------------|--------------------------|--------------------------|--------------------------|
| 1   | A         | Aroma        | Khas madu   | Sedikit aroma daun kelor | Sedikit aroma daun kelor | Sedikit aroma daun kelor |
|     |           | Warna        | Kuning muda | Kuning muda              | Kuning                   | Kuning kecoklatan        |
|     |           | Rasa         | Manis       | Manis                    | Manis                    | Manis                    |
| 2   | B         | Aroma        | Khas madu   | Sedikit aroma daun kelor | Sedikit aroma daun kelor | Sedikit aroma daun kelor |
|     |           | Warna        | Kuning muda | Kuning muda              | Kuning                   | Kuning kecoklatan        |
|     |           | Rasa         | Manis       | Manis                    | Manis                    | Manis                    |
| 3   | C         | Aroma        | Khas madu   | Sedikit aroma daun kelor | Sedikit aroma daun kelor | Sedikit aroma daun kelor |
|     |           | Warna        | Kuning muda | Kuning muda              | Kuning                   | Kuning kecoklatan        |
|     |           | Rasa         | Manis       | Manis                    | Manis                    | Manis                    |

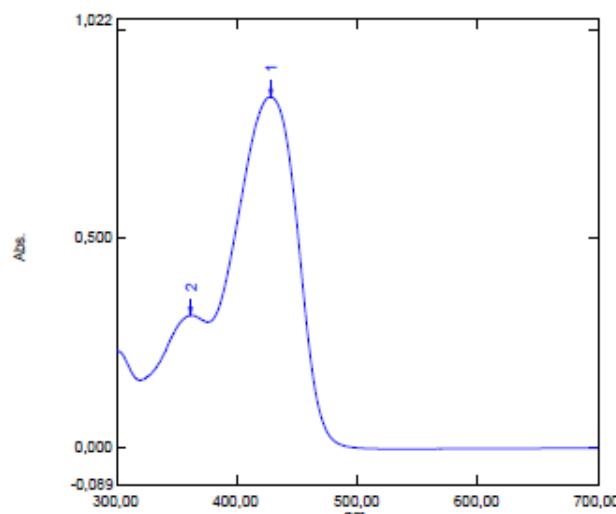
**Lampiran 4. Pengukuran Lamda Maksimum Asam Galat**

Optimization Software:  
[www.balesio.com](http://www.balesio.com)

Lampiran 5. Pengukuran Lamda Maksimum Kuersetin

LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



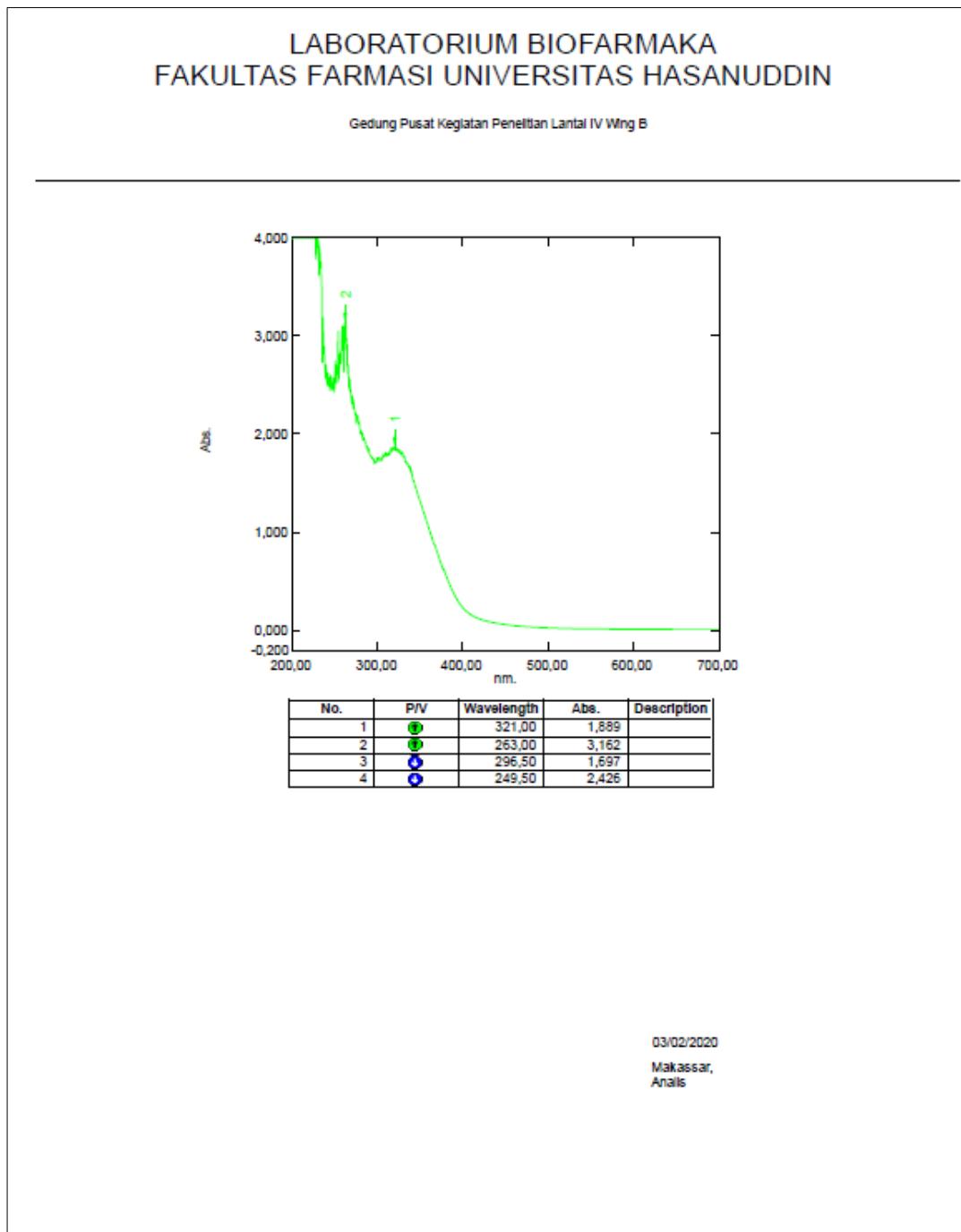
| No. | P/V | Wavelength | Abs.  | Description |
|-----|-----|------------|-------|-------------|
| 1   | ●   | 428,00     | 0,636 |             |
| 2   | ●   | 361,50     | 0,315 |             |
| 3   | ○   | 375,50     | 0,298 |             |
| 4   | ○   | 319,00     | 0,159 |             |

03/02/2020  
Makassar,  
Analis



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

Lampiran 6. Profil senyawa kimia infus daun kelor menggunakan spektrofotometer UV-Vis

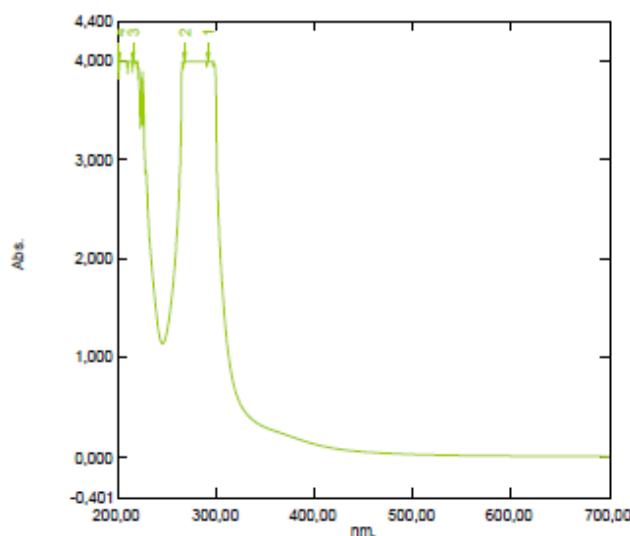


Optimization Software:  
[www.balesio.com](http://www.balesio.com)

Lampiran 7. Profil senyawa kimia MP (Madu Pasaran) menggunakan spektrofotometer UV-Vis

LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



| No. | P/V | Wavelength | Abs.  | Description |
|-----|-----|------------|-------|-------------|
| 1   | ●   | 291,50     | 4,000 |             |
| 2   | ●   | 268,00     | 4,000 |             |
| 3   | ●   | 215,50     | 4,000 |             |
| 4   | ●   | 201,50     | 4,000 |             |
| 5   | ●   | 290,50     | 3,341 |             |
| 6   | ●   | 245,50     | 1,146 |             |
| 7   | ●   | 215,00     | 3,887 |             |

30/04/2020

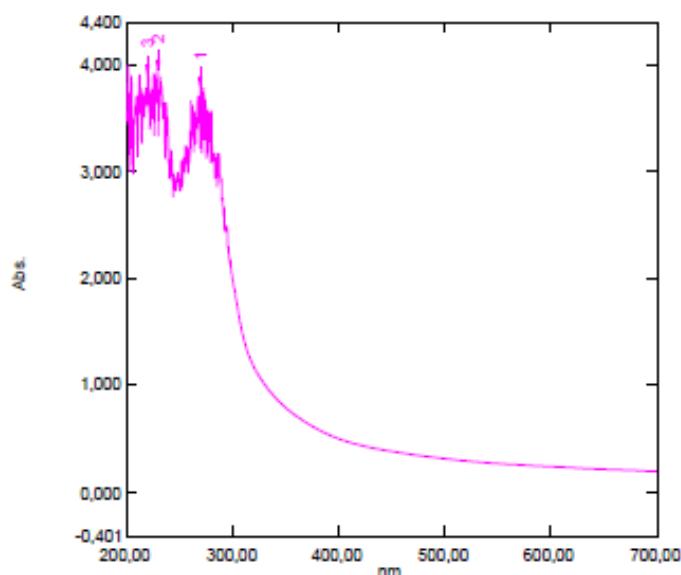
Makassar,  
Analis



Lampiran 8. . Profil senyawa kimia MK A menggunakan spektrofotometer UV-Vis

LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



| No. | P/V | Wavelength | Abs.  | Description  |
|-----|-----|------------|-------|--------------|
| 1   | ●   | 270,00     | 3,804 | madu kelor D |
| 2   | ●   | 229,50     | 3,969 |              |
| 3   | ●   | 220,00     | 3,919 |              |
| 4   | ●   | 244,00     | 2,769 |              |
| 5   | ●   | 222,00     | 3,404 |              |

30/04/2020

Makassar,  
Analis

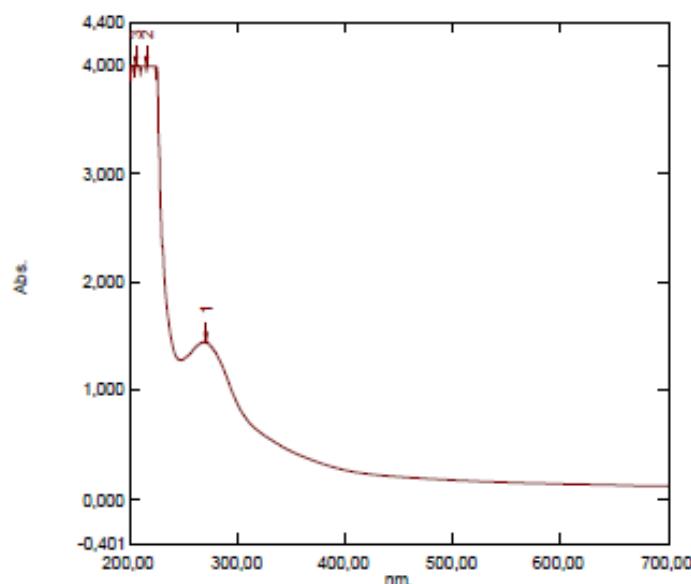


Optimization Software:  
[www.balesio.com](http://www.balesio.com)

Lampiran 9. Profil senyawa kimia MK B menggunakan spektrofotometer  
UV-Vis

LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



| No. | P/V | Wavelength | Abs.  | Description |
|-----|-----|------------|-------|-------------|
| 1   | ●   | 271,50     | 1,456 |             |
| 2   | ●   | 216,00     | 4,000 |             |
| 3   | ●   | 205,00     | 4,000 |             |
| 4   | ●   | 248,00     | 1,285 |             |
| 5   | ●   | 215,50     | 3,940 |             |
| 6   | ●   | 204,50     | 3,896 |             |

30/04/2020

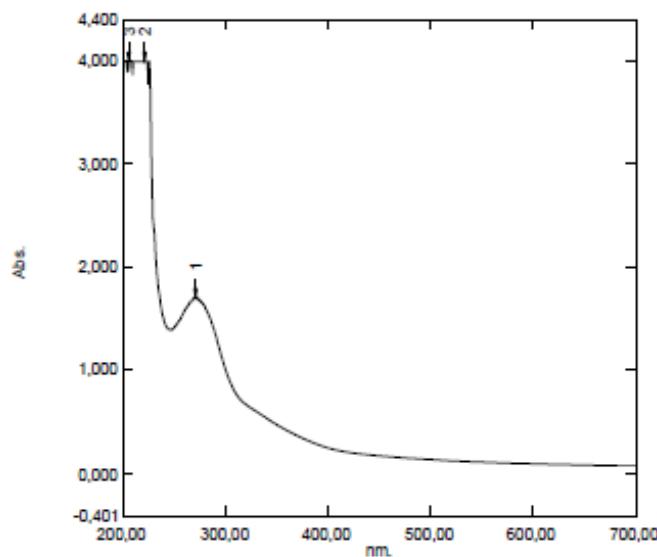
Makassar,  
Analis



Lampiran 10. Profil senyawa kimia MK C menggunakan spektrofotometer UV-Vis

LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



| No. | P/V | Wavelength | Abs.  | Description |
|-----|-----|------------|-------|-------------|
| 1   | ●   | 271,50     | 1,712 |             |
| 2   | ●   | 221,50     | 4,000 |             |
| 3   | ●   | 206,00     | 4,000 |             |
| 4   | ●   | 247,00     | 1,394 |             |
| 5   | ●   | 221,00     | 3,986 |             |
| 6   | ●   | 204,00     | 3,893 |             |

30/04/2020

Makassar,  
Analis

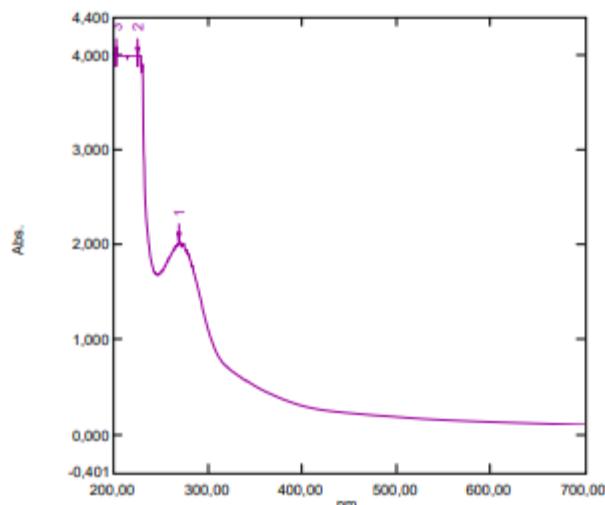


Optimization Software:  
[www.balesio.com](http://www.balesio.com)

Lampiran 11. Profil senyawa kimia MK D menggunakan spektrofotometer UV-Vis

**LABORATORIUM BIOFARMAKA  
FAKULTAS FARMASI UNIVERSITAS HASANUDDIN**

Gedung Pusat Kegiatan Penelitian Lantai IV Wing B



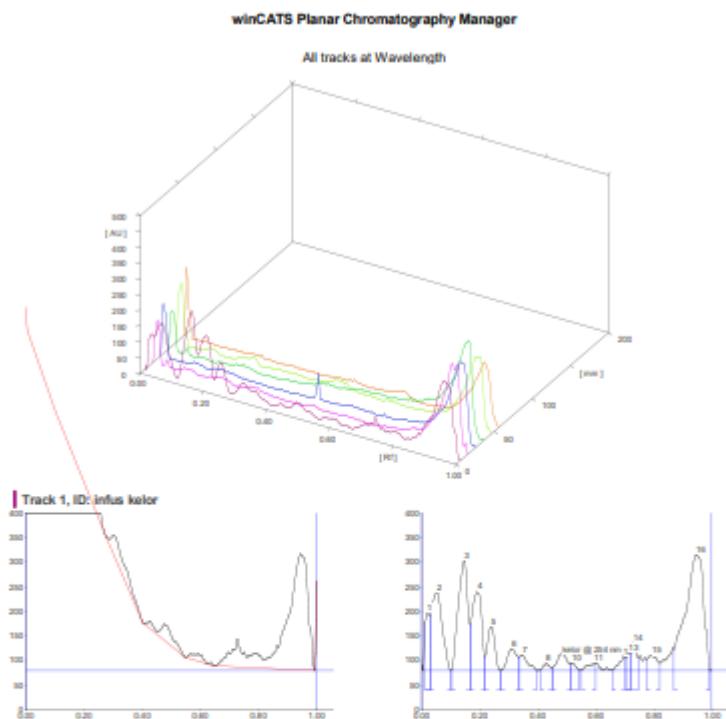
| No. | P/V | Wavelength | Abs.  | Description |
|-----|-----|------------|-------|-------------|
| 1   | ●   | 269,50     | 2,043 |             |
| 2   | ●   | 226,00     | 4,000 |             |
| 3   | ●   | 203,00     | 4,000 |             |
| 4   | ●   | 247,50     | 1,684 |             |
| 5   | ●   | 225,50     | 3,880 |             |
| 6   | ●   | 202,50     | 3,885 |             |

30/04/2020

Makassar,



Lampiran 12. Profil senyawa kimia madu-kelor menggunakan densitometri



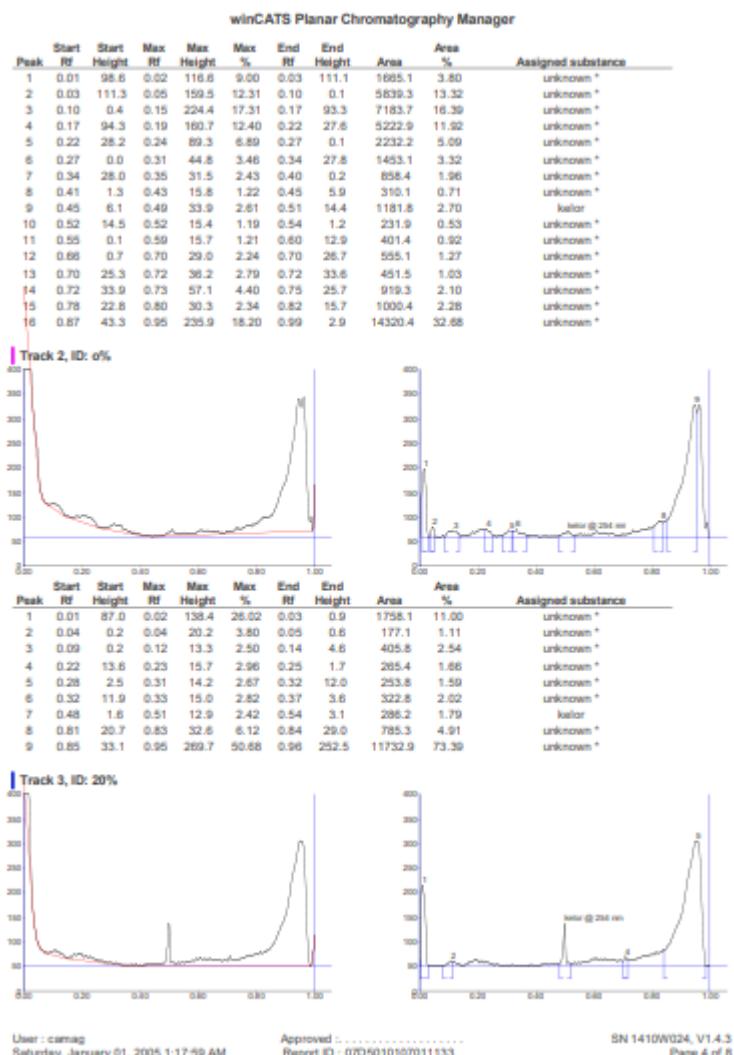
User : camag  
Saturday, January 01, 2005 1:17:59 AM

Approved : .....  
Report ID : 07D5010107011133

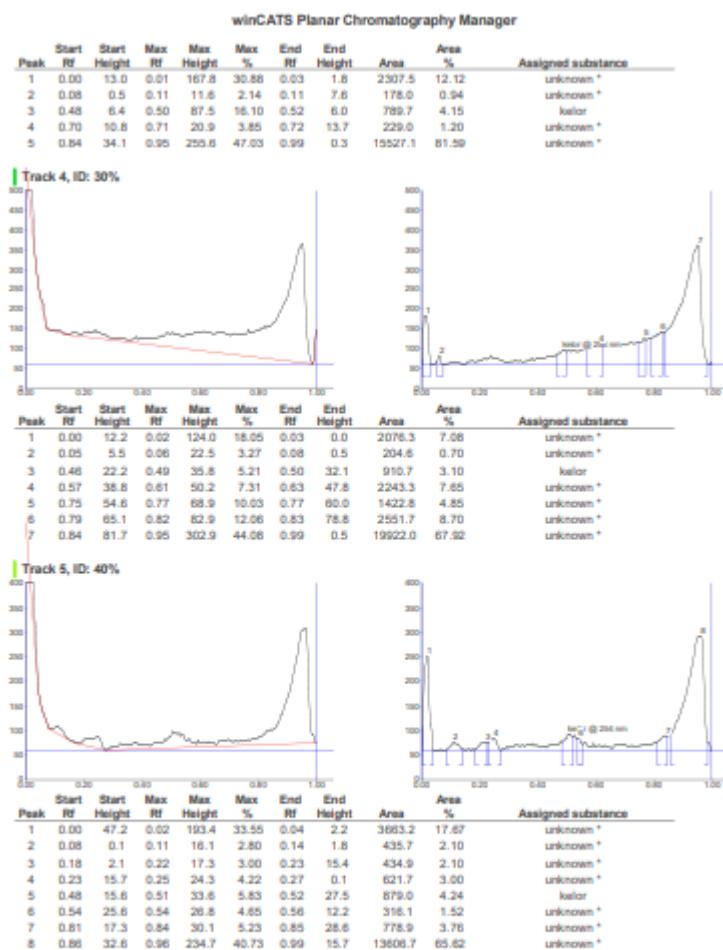
SN 1410W024, V1.4.3  
Page 3 of 8



## Lanjutan lampiran 12.



## Lanjutan lampiran 12.



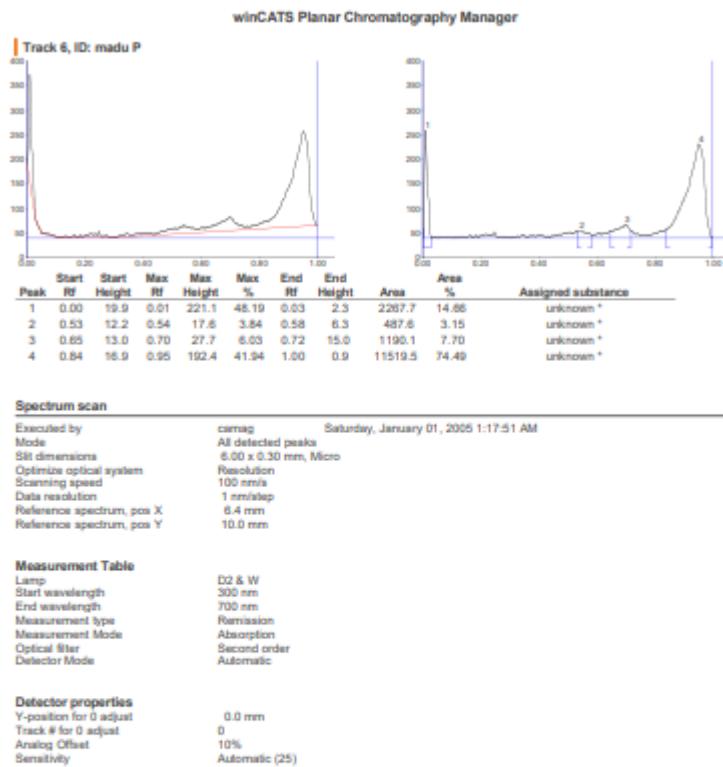
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SN 1410W024, V1.4.3  
Page 5 of 8



## Lanjutan lampiran 12.



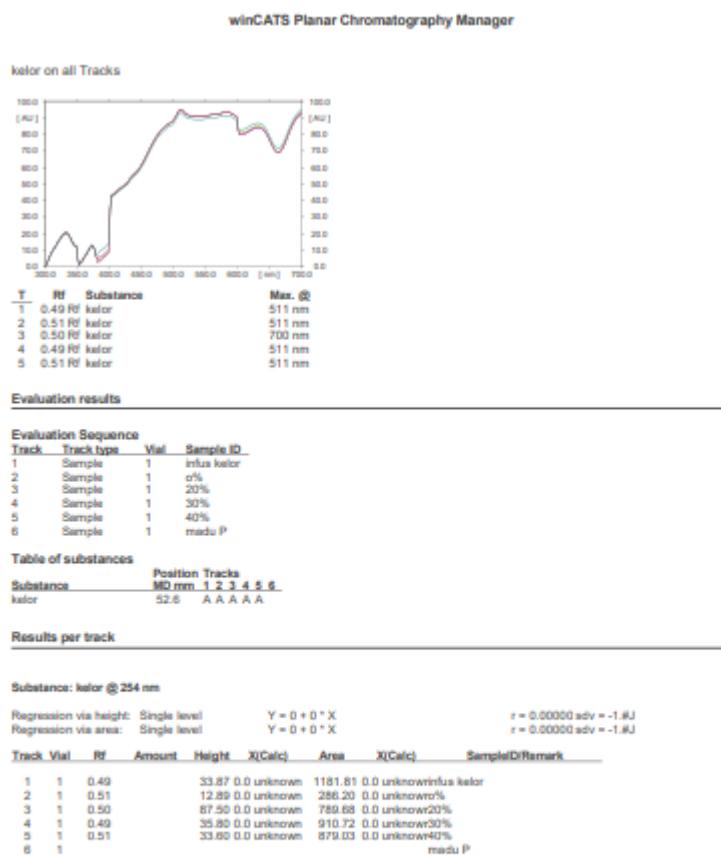
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SN 1410W024, V1.4.3  
Page 6 of 8



## Lanjutan lampiran 12.



User : camag  
 Saturday, January 01, 2005 1:17:59 AM

Approved : .....  
 Report ID : 07D5010107011133

SN 1410W024, V1.4.3  
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Lampiran 13. Gambar Penelitian



Gambar 12. Proses pembuatan infus daun kelor



Gambar 13. Pakan sirup gula dan infus daun kelor untuk lebah (3 : 2)



Gambar 14. Penampakan lempeng di bawah sinar UV 254 nm



Gambar 15. Penampakan lempeng di bawah sinar UV 366 nm



Gambar 16. Proses partisi madukelor dan infus daun kelor

