

DAFTAR PUSTAKA

1. Setiabudy, R., Antimikroba. Di dalam : Ganiswara, G.S., editor. *Farmakologi dan Terapi* edisi 5. FK-UI. Jakarta. 2007. Hal. 585.
2. Franco, B.E., Martínez, M.A., Rodríguez, M.A.S., dan Wertheimer, A.I. The Determinants Of The Antibiotic Resistance Process. *Infection And Drug Resistance* 2009:2. Mexico. 2009. Hal 1–11.
3. Djide, M.N., dan Sartini. *Dasar-Dasar Mikrobiologi Farmasi*. Lephas. Makassar. 2008. Hal 339,367.
4. Keskin, D., dan Toroglu, S. Studies on Antimicrobial Activities of Solvent Extracts of Different Spice. *Journal of Environmental Biology*. Triveni Enterprises. India. 2011. Hal. 251-256.
5. World Health Organization. *The Evolving Threat Of Antimicrobial Resistance Options For Action*. France. GPS Publishing,. 2012. Hal 3-5.
6. Ababutain, I.M. Antimicrobial Activity Of Ethanolic Extracts From Some Medicinal Plant. *Australian Journal Of Basic And Applied Sciences* 5(11). Maret 2011. Hal. 678-683.
7. Soetarno, S., Sukrasno, E., Yulinah, dan Sylvia. Antimicrobial Activities of The Ethanol Extracts of Capsicum Fruits with Different Levels of Pungency. *JMS* Vol. 2 No. 2. Oktober 1997. Hal 57-63.
8. Erturk, O. Antibacterial And Antifungal Activity Of Ethanolic Extracts From Eleven Spices Plants. *Biologia. Bratislava* 61/3. 2006. Hal 275-278.
9. Djarwaningsih, T. Review: *Capsicum* spp. (Cabai): Asal, Persebaran dan Nilai Ekonomi. *BIODIVERSITAS* Oktober 2005. Vol 6. Hal 292-296.
10. Manirakiza, P., Covaci, A., dan Schpens, P. Pungency Principles in *Capsicum* - Analytical Determinations and Toxicology. Di dalam : De AK, editor. *Capsicum : The Genus of Capsicum*. Taylor K- Francis Ltd. 2003. Hal. 71
11. Pruthi, J.S. Chemistry and Quality Control of *Capsicums* and *Capsicum* Products. Di dalam : De AK, editor. *Capsicum : The Genus of Capsicum*. Taylor K- Francis Ltd. 2003. Hal. 26-28

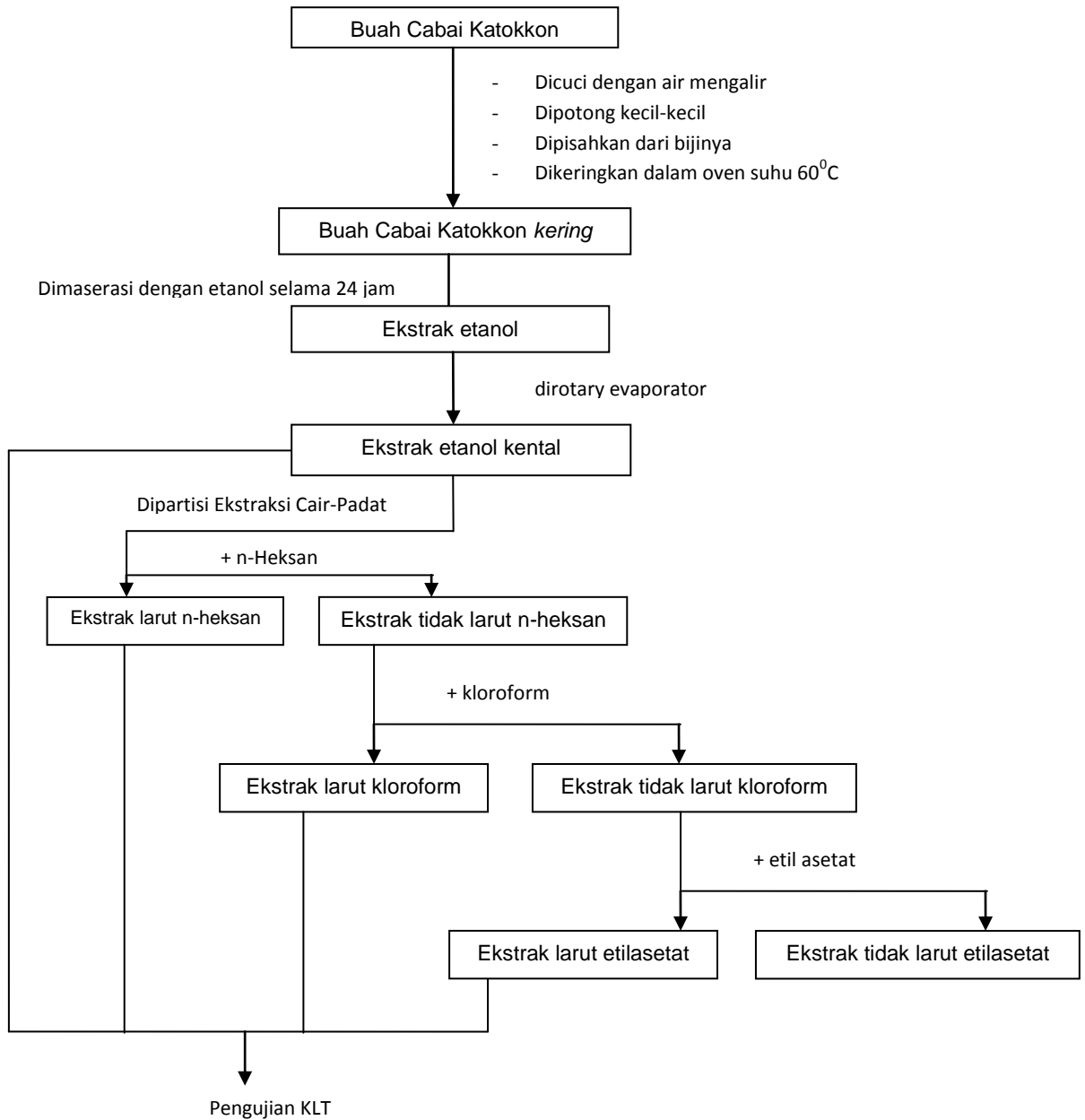
12. Tiwari, P., Kumar, B., Kaur M., Kaur, G., dan Kaur, H. Phytochemical Screening And Extraction: A Review. *Internationale Pharmaceutica Scientia* Januari-Maret 2011. Vol 1. Issue 1. Hal 98-106.
13. Handa, S.S., Khanuja, S.P.S., Longo, G., dan Rakesh, D.D. *Extraction Technologies for Medicinal and Aromatic Plants*. ICS-UNIDO. Trieste. 2008. Hal 7, 22, 70.
14. Haryono, J. *Sediaan Galenik*. Jakarta : Depkes RI. 1986. Hal 6-19.
15. Deinstrop, E.H. *Applied Thin-Layer Chromatography*. Weinheim : WILEY-VCH Verlag GmbH & Co. KGaA. 2007. Hal 1-3
16. Yazid, E. *Kimia Fisika untuk Paramedis*. Yogyakarta : Penerbit Andi. 2005. Hal 193,209
17. Choma, I. The Use of Thin-Layer Chromatography with Direct Bioautography for Antimicrobial Analysis. [serial on the internet] 1 September 2005. 2012 [dikutip 5 November 2012]; LCGC Europe Vol. 18, Issue 9. [7 screen] Available from: <http://www.chromatographyonline.com/lcgc/Features/The-Use-of-Thin-Layer-Chromatography-with-Direct-B/ArticleStandard/Article/detail/177453>
18. Tenover, F.C. Mechanisms of Antimicrobial Resistance in Bacteria. *The American Journal of Medicine* Vol 119 (6A). Elsevier Inc. 2006. Hal. S3–S10.
19. Pelczar, Jr. M. J. *Dasar-dasar Mikrobiologi*. R.S. Hadjoetomo. UI-Press. Jakarta. 1988.
20. Holt, J. G. *Bergey's Manual of Determinative Bacteriology*. [9th Ed.]. The Williams & Wilkins Company. Baltimore. Maryland 21202 United States of America. 1994.
21. Buick, S.F. *Development of an In Vitro Diagnostic Technique for Malassezia furfur*. Tesis. University of Canterbury. Hal 11-15

22. Inamandar, A.C., Paliit, A. The Genus *Malassezia* and Human disease. *Indian J Dermatol Venereol Leprol* [serial on the internet] 2003 [dikutip 8 April 2013] ;69:265-70.
Available from: <http://www.ijdvl.com/text.asp?2003/69/4/265/4990>
23. Najib, A. Isolasi Dan Identifikasi Komponen Kimia Ekstrak Dietil Eter Daun Senggani (*Melastoma malabathricum* L.). *Majalah Farmasi dan Farmakologi Vol 12. No. 1. Maret.* 2008. Hal. 11-16.
24. Parrot, E.L. *Pharmaceutical Technology Fundamental Pharmaceutics.* USA. Burgess Publishing Company. 1970. Hal 286
25. Phyllis, E., editor. *Difco Manual.* 11th ed. Difco Laboratories, Division of Becton Dickinson and company. Sparks, Maryland. USA. Hal 349,402.
26. Pandey, B., Ghimire, P., dan Agrawal, V.P. *Studies on the antibacterial activity of the actinomycetes isolated from the Kumbu region of Nepal.* [Serial on internet]. 2004. [dikutip 5 November 2012] Available from: <http://www.aehms.org/pdf/panday%20f.pdf>
27. Rante, H., Wahyono, Murti, Y.B., dan Alam, G. Purifikasi dan Karakterisasi Senyawa Antibakteri dari Actinomycetes Asosiasi Spons Terhadap Bakteri Patogen Resisten. *Majalah Farmasi Indonesia*, 21(3). 2010. Hal. 158-165
28. Kusumaningtyas, E., Astuti, E., Darmono. Sensitivitas Metode Bioautografi Kontak dan *Agar Overlay* dalam Penentuan Senyawa Antikapang. *Jurnal Ilmu Kefarmasian Indonesia* September 2008. Vol. 6. No.2. Hal. 75-79
29. Verbitsky, S.M., McChesney, J.D., Gourdin, G.T., Ikenouve, L.M. Methods and Compositions for Detecting Active Components using Bioluminescent Bacteria and Thin Layer Chromatography. *United States Patent Application Publication* 9 Agustus 2007. [21 screen]
30. Rahim, R.A., dan Mat, I. Phytochemical Contents of *Capsicum Frutescens* (Chili Padi), *Capsicum Annum* (Chili Pepper) and *Capsicum Annum* (Bell Peper) Aqueous Extracts. *International Conference on Biological and Life Sciences.* 2012. Vol. 4. Hal. 164-167

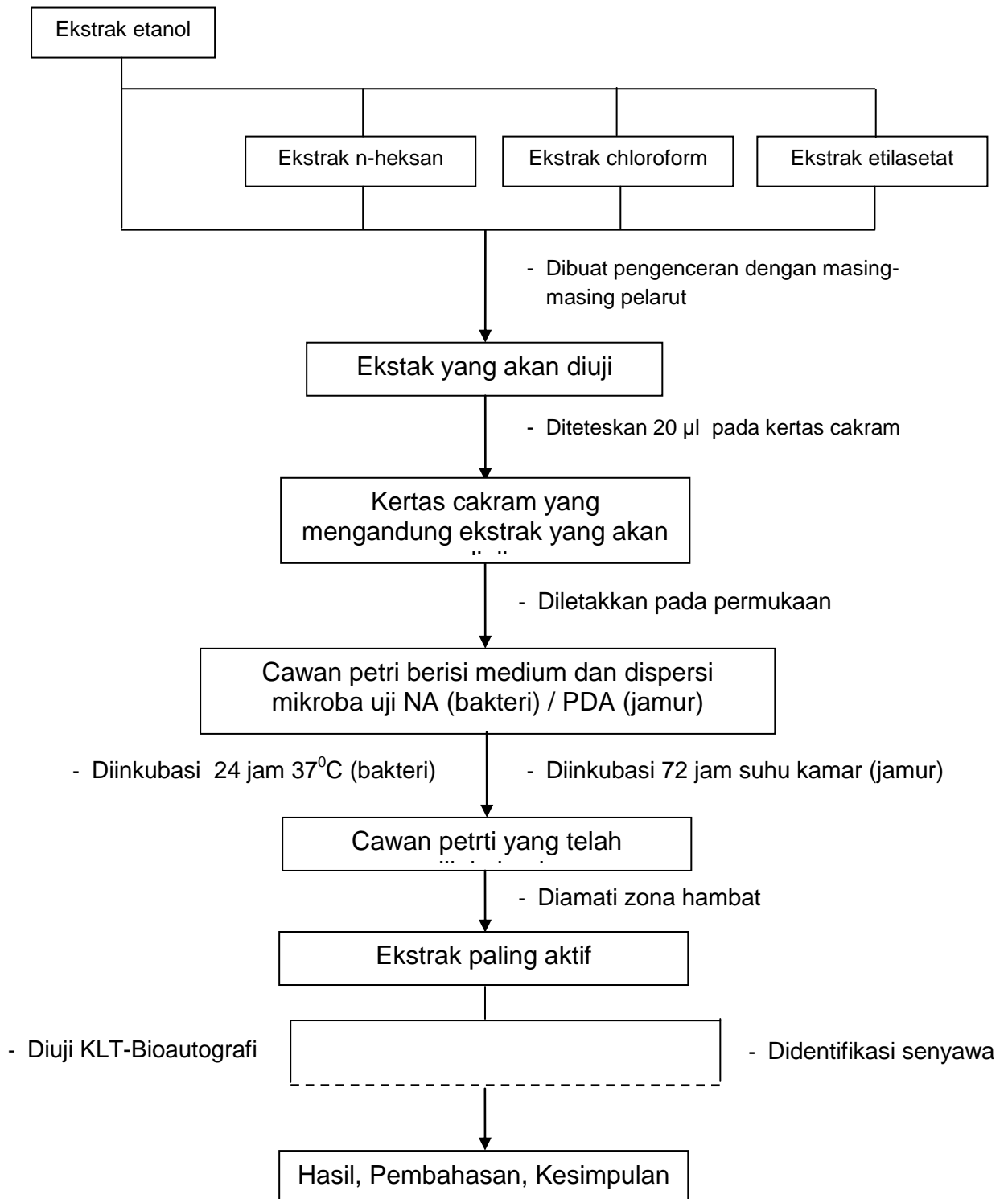
LAMPIRAN

Lampiran 1. Skema Kerja

Penyiapan Sampel, Ekstraksi, dan Partisi



Uji Aktivitas Antimikroba, KLT-Bioautografi, Identifikasi Senyawa



Lampiran 2. Bukti Determinasi Sampel Buah Cabai Katokkon



BAGIAN BIOLOGI FARMASI
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SURAT KETERANGAN

No.: BF//6 / Ident/Det/III/2013

Kepada Yth. :
Sdri/Sdr. Iin Fitriana Pakata
NIM. N11109272
Universitas Hasanudin
Di Makasar

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi/determinasi sampel yang Saudara kirimkan ke Bagian Biologi Farmasi, Fakultas Farmasi UGM, adalah :

No.Pendaftaran	Jenis	Suku
116	<i>Capsicum annum</i> L. var. <i>chinensis</i>	Solanaceae

Demikian, semoga dapat digunakan sebagaimana mestinya.

Yogyakarta, 28 Maret 2013
Ketua

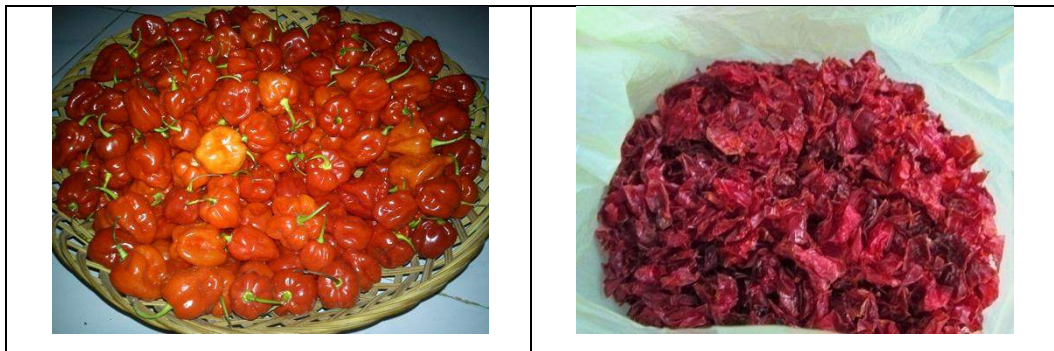


Dr. Wahyono, SU., Apt.
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Lampiran 3. Gambar Hasil Penelitian



Gambar 5. Foto tanaman cabai katokkon (*Capsicum annuum* L. var. *chinensis*)



a.

b.

Gambar 6. Foto sampel buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)

Keterangan :

a. Buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)

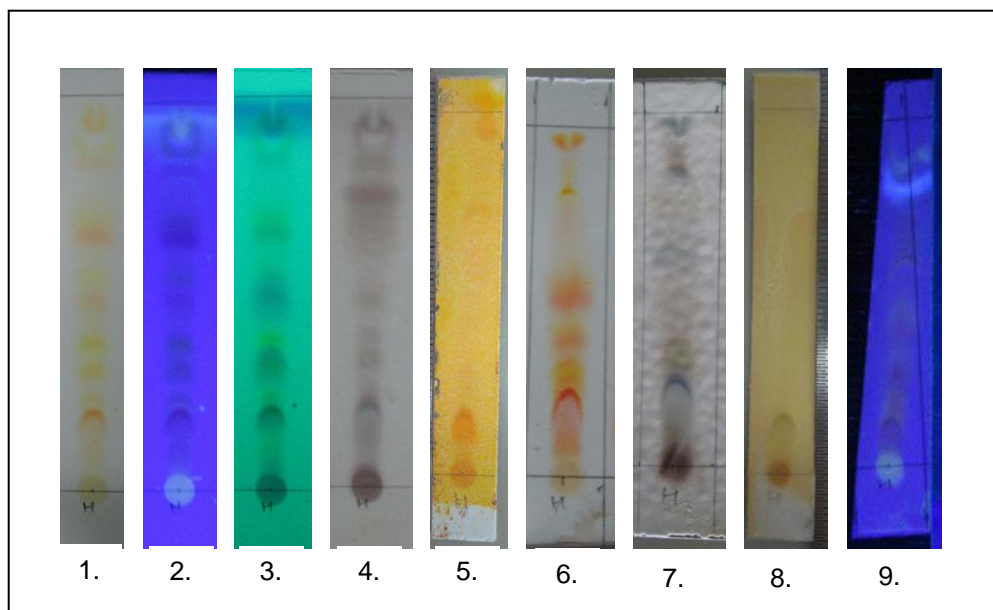
b. Simplisia buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)



Gambar 7. Ekstrak etanol dan hasil partisi (ekstrak n-heksan, ekstrak kloroform, dan ekstrak etilasetat)

Keterangan :

- a. Ekstrak etanol buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)
- b. Hasil partisi ekstrak buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)



Gambar 8. Kromatogram lapis tipis ekstrak n-heksan buah cabai katokkon (*Capsicum annuum* L. var. *chinensis*)

Keterangan :

Fase diam : Silika gel GF-254

Fase gerak : Heksan : etilasetat (3:1)

1. Visual
2. UV 366 nm
3. UV 254 nm
4. Pereaksi H_2SO_4
5. Pereaksi Dragendorff
6. Pereaksi $AlCl_3$
7. Pereaksi Lieberman-Burchard
8. Pereaksi $FeCl_3$
9. Pereaksi Asam Sitroborat

Lampiran 4. Komposisi Reagen

1. Asam Sulfat

Asam sulfat pekat : 10 mL

Air : 100 mL

2. Lieberman-Burchard

Asam asetat anhidrat : 1 mL

Asam sulfat pekat : 1 mL

Metanol : 10 mL

3. Dragendorf

Larutan A :

Bismuth nitrat : 1,7 g

Asam tartrat : 20 g

Air : 80 mL

Larutan B :

KI : 16 g

Air : 40 mL

Campur dalam volume yang sama larutan A dan larutan B.

4. Feri Klorida

FeCl_3 : 1 g

Air : 100 mL

5. Aluminium Klorida

FeCl_3 : 1 g

Metanol : 100 mL

6. Asam Sitroborat

Asam borat : 0,5 g

Asam sitrat : 0,5 g

Etanol : 50 mL