

BIBLIOGRAPHY

- Abass, A. (2016). Evaluation of The Antimycobacterial and Antimycolactone Efficacy of Kombucha [Thesis], University Of Ghana, College Of Basic and Applied Sciences, Departement of Biochemistry, Cell and Molecular Biology, Ghana. Retrieved from <https://ugspace.ug.edu.gh/handle/123456789/22674>
- Allaily, Miswar, Rianah S., Usman Y., Zulffan., Yaman M.A. (2017). *Potensi Pakan Fermentasi Anaerob Menggunakan Bahan Pakan Lokal untuk Ternak Itik. Aceh* : Laboratorium Lapangan Peternakan, Program Studi Peternakan, Fakultas Pertanian Universitas Syiah Kuala, Darussalam Aceh. Retrieved from <https://repository.pertanian.go.id/server/api/core/bitstreams/3920329e-9a7e-42a4-8e8e-9d8ed37692bc/content#:~:text=Fermentasi%20anaerob%20adalah%20proses%20yang,maka%20pakan%20memiliki%20pH%20asam>.
- Dirhamsyah, T. 2021. Buku Saku Tanaman Obat : *Warisan Tradisi Nusantara untuk Kesejahteraan Rakyat. Bogor* : Balai Penelitian Tanaman Rempah dan Obat. Retrieved from <https://repository.pertanian.go.id/items/fa5dbf33-614f-45a3-94a8-71137530d7d9>
- Fatimah, I. R., Bone, M., & Sastyarina, Y. (2020). Proceeding of Mulawarman Pharmaceuticals Conferences. *Uji Aktivitas Ekstrak Alang-Alang (Imperata cylindrica L) sebagai Peluruh Kalsium Batu Ginjal secara In Vitro*, 38-44. Retrieved from <https://prosiding.farmasi.unmul.ac.id/index.php/mpc/article/view/391/376>
- Firdaus, S., Indah C, A., Isnaini, L., & Aminah, S. (2020). Prosiding Seminar Nasional Unimus. "Review" *Teh Kombucha Sebagai Minuman Fungsional dengan Berbagai*, 715-730. Retrieved from <https://prosiding.unimus.ac.id/index.php/semnas/article/download/738/747>
- Kartika, D., Gultom, V. Y., & Sitompul, A. S. (2020). Jurnal Farmasi. *EFEKTIVITAS ANALGETIK EKSTRAK ETANOL AKAR ALANG-ALANG*, 97-100. Retrieved from <https://ejournal.medistra.ac.id/index.php/JFM/article/view/374/190>
- Khaerah, A., & Akbar, F. (2019). PROSIDING SEMINAR NASIONAL. *Aktivitas Antioksidan Teh Kombucha dari Beberapa*, 472-476. Retrieved from <https://ojs.unm.ac.id/semnaslemlit/article/download/11466/6714>
- Naland, H. (2004). *Kombucha Teh Ajaib Pencegah dan Penyembuh Aneka Penyakit*. Jakarta: PT.Agro Media Pustaka. Retrieved from http://opacperpus.jogjakota.go.id/index.php/home/detail_koleksi?kd_buku=025869&id=1&kd_jns_buku=SR
- Munarsih, E., & Rini, P. (2019). Jurnal Penelitian Sains 21. *Perbedaan kadar kolesterol total sebelum dan sesudah pemberian*, 163-167.

- Prisdiany, Y., & Levita, J. (2019). Farmaka. *AKTIVITAS ANTIHIPERTENSI TANAMAN GENUS IMPERATA*, 306-314. Retrieved from <https://jurnal.unpad.ac.id/farmaka/article/viewFile/22145/pdf>
- Rahajeng, V. N., & Noprizon, S. P. (2020). Jurnal Ilmiah Bakti Farmasi. *Uji Efek Antiinflamasi Ekstrak Etanol Batang Alang-Alang*, 37-44. Retrieved from <https://ejournal.stifibp.ac.id/index.php/jibf/article/view/57/62>,
- Rinihapsari, E., Richter, C. A., (2013). Jurnal Ilmiah Farmasi. *Fermentasi kombucha dan potensinya sebagai minuman kesehatan*. Retrieved from <http://journal.stifar.ac.id/ojs/index.php/js/article/view/28>
- Salsabila, Q. (2021). *Jurnal Penelitian Perawat Profesional*, 41-50. Retrieved from <https://jurnal.globalhealthsciencegroup.com/index.php/JPPP/article/view/283>
- Santoso. 2018. Efek Laksatif Infusa Daun Jati Cina (*Cassia Angustifolia L*) Pada Mencit (*Mus musculus*) Swiss Webster. Bandung : Universitas Maranatha. Retrieved from <http://repository.maranatha.edu/21961/>
- Simanjutak, D.H., Herpandi dan S.D. Lestari, 2016. Karakteristik Kimia dan Aktivitas Antioksidan Kombucha Tumbuhan Apu-apu (*Pistia stratiotes*) Selama Fermentasi. Jurnal Teknologi Hasil Perikanan. Retrieved from <https://media.neliti.com/media/publications/62170-ID-karakteristik-kimia-dan-aktivitas-antiok.pdf>
- Sulistiyowati E, Hsu JH, Cheng YB, Chang FR, Chen YF, and Yeh JL. 2017. Indonesian herbal medicine prevents hypertension-induced left ventricular hypertrophy by diminishing NADPH oxidase-dependent oxidative stress. *Oncotarget*. Retrieved from https://www.researchgate.net/publication/320161606_Indonesian_herbal_medicine_prevents_hypertension-induced_left_ventricular_hypertrophy_by_diminishing_NADPH_oxidase-dependent_oxidative_stress
- Zubaidah, E., Fibrianto, K., & Kartikaputri, S. D. (2021). Bioteknologi & Sains Indonesia. *POTENSI KOMBUCHA DAUN TEH (Camellia sinensis) DAN DAUN KOPI ROBUSTA (Coffea robusta) SEBAGAI MINUMAN PROBIOTIK*, 185-195. Retrieved from https://www.researchgate.net/publication/356995037_POTENSI_KOMBUCHA_DAUN_TEH_Camellia_sinensis_DAN_DAUN_KOPI_ROBUSTA_Coffea_robusta_SEBAGAI_MINUMAN_PROBIOTIK#read

APPENDIX

1. Approved Recipe

Recipe Name : A FERMENTED DRINK MADE FROM CHINESE TEAK LEAF AND ALANG ALANG EXTRACT
TITLE OF C&D : A FERMENTED DRINK MADE FROM CHINESE TEAK LEAF AND ALANG ALANG EXTRACT AS A DRINK WITH HIGH EFFICACY

Yield : 25-30 portion

Main Ingredients : Dried chinese teak leaf, Alang alang, Scoby, Starter kombucha
Ingredients :

- 3g Dried chinese teak leaf
- 500ml Water
- 150g Sugar
- 80g Alang alang
- 1 pcs Scoby
- 700ml Fresh water
- 100ml Starter kombucha

Method :

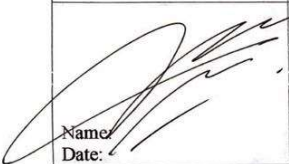
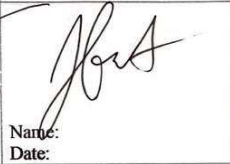
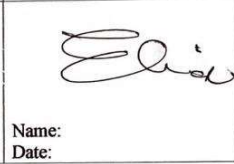
1. Boil water, sugar, alang alang in a pot for 8-10 minutes with medium heat, stir.
2. Add in the Chinese teak leaf and stir. Wait for 3-6 minutes or until the color becomes dark, then turn off the heat. Strain the liquid
3. Wait until the mixture gets to room temp or 35°C.
4. sterilize the jars in hot water.
5. Wait until it gets cool, then wipe out all the liquid in the jar.
6. Pour the mixture inside the jar, mix with water, starter and put the scoby inside. Stir with wooden spoon, dont use metal utensil for this part.
7. Seal the lid with paper towel, and rubber band
8. Keep the jar in dry place and room temp. Dont put in direct sunlight or refrigerator.
9. wait for the fermentation time 7-10 days, test every 2 days. if you get the desired taste, the drink can be enjoyed.

RECIPE BACKGROUND (50 – 100 WORDS)

the purpose of this recipe is to find alternative ingredients for making fermented drinks using scoby, which usually uses a tea base to produce kombucha. This recipe uses the basic ingredients of Chinese teak leaves and alang alang which are good for digestive health, besides that it can increase the functionality of Chinese teak leaves and alang alang. Student

Name : Fernando Stevanus Liwanto

NIM : 2174130010009

| 1 st Advisor | 2 nd Advisor | 3 rd Advisor |
|---|---|--|
|  |  |  |
| Name: Date: | Name: Date: | Name: Date: |

2. Approved Sensory



Akademi Kuliner & Patiseri
OTTIMMO
INTERNASIONAL
CULINARY ARTS GASTRONOMY BAKING & PASTRY ARTS

**CULINARY INNOVATION AND NEW
PRODUCT DEVELOPMENT
SENSORY TEST**

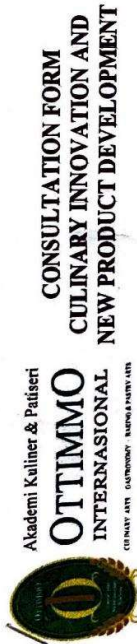
DATE : 19 May 2023
NAME : Fernando Stevanus Livanto
NIM : 2174130010009
PRODUCT : Fermentasi sari daun jati cina & alang-alang
ADVISOR : Michael Valent, A.Md.Par.

| PANELIST | SIGHT | SMELL | TEXTURE | TASTE | TOTAL |
|-------------|-------|-------|---------|-------|-------|
| Panelist 1 | √ | √ | √ | √ | √ |
| Panelist 2 | √ | √ | √ | √ | √ |
| Panelist 3 | √ | X | √ | √ | √ |
| Panelist 4 | √ | X | √ | √ | √ |
| Panelist 5 | √ | X | √ | X | X |
| Panelist 6 | √ | √ | √ | √ | √ |
| Panelist 7 | √ | √ | √ | √ | √ |
| Panelist 8 | √ | X | √ | X | X |
| Panelist 9 | √ | X | √ | X | X |
| Panelist 10 | √ | X | √ | X | X |

NOTES :



3. Correction List



| No | Date | Topic Consultation | Name/Signature |
|----|------------|----------------------------------|--------------------|
| 1. | 28/2 23 | Idea brainstorming | <i>[Signature]</i> |
| 2. | 17/3 23 | Food trial 1 | <i>[Signature]</i> |
| 3 | 27/3 23 | Recipe Consultation | <i>[Signature]</i> |
| 4 | 2/5 23 | new product consultation | <i>[Signature]</i> |
| 5 | 10/5 23 | New recipe | <i>[Signature]</i> |
| 6 | 27/6 23 | Product development Consultation | <i>[Signature]</i> |

Name : *Fernando S. Stevens*
 Student Number :
 Advisor : *Michael Volken*

| No | Date | Topic Consultation | Name/Signature |
|----|------------|---|--------------------|
| 7 | 5/7 23 | End Report Consultation (Chapter 1-3) | <i>[Signature]</i> |
| 8 | 27/7 23 | Presentation preparation | <i>[Signature]</i> |
| 9 | 1/8 23 | End Report Consultation (Chapter 2 + 3 + packaging) | <i>[Signature]</i> |
| 10 | 14/8 23 | End Report Consultation (Chapter 4 + 5) | <i>[Signature]</i> |

4. Systematic Process Documentation

1. Boil water, sugar, and reeds for 8-10 minutes, stir then add in the senna leaves then stir, boil for 3-5 more minutes.



2. Off heat, cool the extracted senna leaves and reed until room temp



3. Prepare fresh water



4. Sterilize glass jar, let it dry



5. add the mixture, fresh water, starter kombucha, and scoby in the jar



6. cover the top of the jar with paper towel and seal with rubber band, store in room / cabinet with no direct sunlight



7. in couple days, the new scoby will be produce meaning the fermentation proces is working.



8.) in day 10, the fermentation is enough and ready to drink, or leave it for 1-2 month to make it as starter for more production.

