

[2.2.1] Food Waste (Parsial)

| No. | lenis Samnah | Jumlah (TON) | | | | | |
|-----|------------------------------|--------------|------------|-----------|--|--|--|
| | Jenis Jampan | Total | Down-cycle | Up-cycle | | | |
| 1. | Daun | 4,5 ton | - | 4,5 ton | | | |
| 2. | Ranting dan Dahan Tanaman | 2,59 ton | - | 2,59 ton | | | |
| 3. | Sisa Makanan | 0.318 ton | - | 0.318 ton | | | |
| | TOTAL | 7,408 ton | - | 7,408 ton | | | |

Description:

The Faculty of Medicine Universitas Indonesia has been processing all organic waste into compost beneficial for surrounding plants since 2021.

Here is the documentation and process for the organic waste processing at FKUI:



- 1. The initial process involves collecting organic waste such as dried leaves, plants, tree branches, and food scraps.
- 2. Sorting process, ensuring that only leaves and small branches are included.
- 3. Set up a closed container for composting.



4. The sorted leaves and branches, along with food scraps, are then taken to the Compost House.

- 5. Shredding Process
- 6. ackaging Process
- 7. A solution of EM4 mixed with water is added to the compost bags.
- 8. The compost is allowed to rest for 3 to 4 weeks until it is ready for harvesting.
- 9. The finished compost is distributed to plants in the FKUI area.

Links to the FKUI policies and circular letters can be found here:

- 1. <u>https://drive.google.com/drive/u/0/folders/1P-jo-kyT3X7XhfNEhyPnXurjl1WAtDbO</u>
- 2. <u>https://drive.google.com/drive/folders/1-Y4ZjABv_SpuqwSNFoVFdMP--wbC-OMm</u>

The production of compost and organic waste processing at FKUI is centralized at the FKUI Compost House, which is a grant from ILUNI FKUI for the 1990-1991 period (ILUKI OKE).



The construction of the Compost House serves as a space for the production and collection of organic waste into compost.





TEMPAT PENAMPUNGAN DAN PENGOLAHAN SAMPAH ORGANIK



PROSES PEMILAHAN SAMPAH ORGANIK RANTING DAN DAUN KERING OLEH PETUGAS KEBERSIHAN





PENGGILINGAN



PENGEMASAN DAN PENIMBANGAN



PENCAMPURAN DENGAN EM4



PUPUK SIAP DIGUNAKAN



PROSES FERMENTASI

| | PR | OSES PEM | BUATAN | | | ESTIN | MASI HASIL | KOMPOS | |
|----|--------------------------------|------------------|-------------------------|----------------|----|-----------|------------------|------------------------|----------------|
| NO | TANGGAL | Jumlah karung | Vol. rata- rata (Kg) | Jumlah (Kg) | NO | TANGGAL | Jumlah karung | Vol. rata-rata (Kg) | Jumlah (Kg) |
| 1 | 24-Jan-22 | 15 | 35 | 525 | 1 | 31-Mar-22 | 15 | 12 | 180 |
| 2 | 07-Feb-22 | 15 | 35 | 525 | 2 | 27-Apr-22 | 15 | 15 | 225 |
| 3 | 01-Apr-22 | 15 | 35 | 525 | 3 | 28-Jun-22 | 15 | 17 | 255 |
| 4 | 30-Jun-22 | 15 | 31 | 465 | 4 | 20-Aug-22 | 15 | 14 | 210 |
| 5 | 22-Aug-22 | 15 | 34 | 510 | 5 | 25-Oct-22 | 15 | 15 | 215 |
| 6 | 03-Oct-22 | 6 | 33 | 198 | 6 | 03-Nov-22 | 6 | 15 | 215 |
| | т | OTAL (Kg) | | 2.748 | | | | | 1.300 |
| | Keterangan : No. 1-5 Proses | Manual | | | | | | | |
| | No. 6 Sudah me | inggunakan | Mesin ailina ka | mpos | | | | | |

MAKING FERTILIZER FROM EXPIRED MILK



PENGANGKUTAN SUSU DARI TPS



SUSU BUBUK YANG SUDAH DILARUTKAN AIR



CAIRAN PUPUK YANG TELAH DICAMPUR BAHAN FERMENTASI





HASIL PEMBERIAN PUPUK CAIRAN SUSU KADALUARSA

TUJUAN

- 1. <u>Meminimalisir bahan</u> B3 yang <u>berlebihan</u> di <u>dalam</u> TPS B3
- 2. <u>Pemanfaatan Limbah sebagai bahan</u> <u>tambahan pupuk</u> yang <u>alami</u>
- 3. Fermentasi secara alami
- 4. <u>Kandungan pupuk menjadi lebih</u> kaya <u>akan zat</u> hara <u>setelah ditambahkan</u> <u>bahan</u> susu
- 5. <u>Tanaman Menjadi lebih subur dengan</u> adanya pupuk tersebut



KENAPA SUSU?

 kompos yang difortifikasi dengan bahan tertentu akan memperkaya kandungan nutrisi seperti fosfor, kalium, nitrogen
Kompos akan terfermentasi secara alami dan dapat terdekomposisi dengan sempurna karena adanya protein susu bubuk

3. <u>Limbah susu bubuk yang disemprotkan</u> (dengan waktu tertentu)akan meningkatkan lebar daun dan pertumbuhan pada bunga

Milk Fertilizer (Pupuk Susu), which can be used as a fermentation agent for compost and as compost for flower growth.



Here are the data on the implementation of compost production at FKUI

for the year 2023, as shown in the following table:

DATA TABEL PEMBUATAN KOMPOS (DAUN KERING, KULIT TELUR, DAN KULIT BUAH)

| | TRHON 2023 | | | | | | | | | | |
|------------------|------------|------------------|------------------------|----------------|----|------------|---|-------------------------|----------------|----------------------|---------|
| | | | | | | | | | | | |
| PROSES PEMBUATAN | | | | HASIL KOMPOS | | | | | | | |
| No. | Tanggal | Jumlah Karung | ¥ol Rata- Rata (kg) | Jumlah (kg) | No | Tanggal | Jumlah Pupuk uang dihasilkan (per kemasan 3kg) | ¥ol. rata- rata (kg) | Jumlah (kg) | Jumlah Persediaan | Satuan |
| 1 | 05/01/2023 | 20 | 30 | 600 | 1 | 09/03/2023 | 15 | 10 | 150 | 50 | kemasan |
| 2 | 02/02/2023 | 20 | 24 | 480 | 2 | 11/04/2023 | 20 | 12 | 240 | 80 | kemasan |
| 3 | 09/03/2023 | 16 | 30 | 480 | 3 | 25/05/2023 | 15 | 15 | 225 | 75 | kemasan |
| 4 | 25/05/2023 | 19 | 30 | 570 | 4 | 08/06/2023 | 19 | 17 | 323 | 108 | kemasan |
| 5 | 08/06/2023 | 23 | 30 | 690 | 5 | 18/07/2023 | 20 | 14 | 280 | 93 | kemasan |
| 6 | 18/07/2023 | 26 | 30 | 780 | 6 | 22/08/2023 | 15 | 15 | 225 | 75 | kemasan |
| 7 | 26/09/2023 | 29 | 25 | 725 | 7 | 26/09/2023 | 15 | 15 | 225 | 75 | kemasan |
| TOTAL 4325 | | | | TOTAL 1668 556 | | | | | kemasan | | |

PROSES PEMBUATAN PUPUK DARI SUSU KADALUARSA TAHUN 2023

| No. | Tanggal | Jumlah (kemasan) | ¥ol Rata- Rata (gr) | Jumlah (gr) | Hasil setelah dilaurtkan (liter) |
|-----|------------|---------------------|------------------------|-------------|-------------------------------------|
| 1 | 25/05/2023 | 5 | 35 | 175 | 2,5 |
| 2 | 08/06/2023 | 6 | 35 | 210 | 3 |
| 3 | 18/07/2023 | 7 | 35 | 245 | 3,5 |
| 4 | 26/09/2023 | 5 | 35 | 175 | 2.5 |
| | 1 | TOTAL | 805 | 9 | |





PEMANFAATAN PUPUK KOMPOS





HASIL PUPUK KOMPOS DARI BUAH BUAHAN KULIT TELUR FERMENTASI SELAMA 6 BULAN



HASIL PUPUK KOMPOS DARI DAUN KERING

