

Empowering Student Entrepreneurship Through Student Research Activity

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Student Research Organizations in Universitas Brawijaya

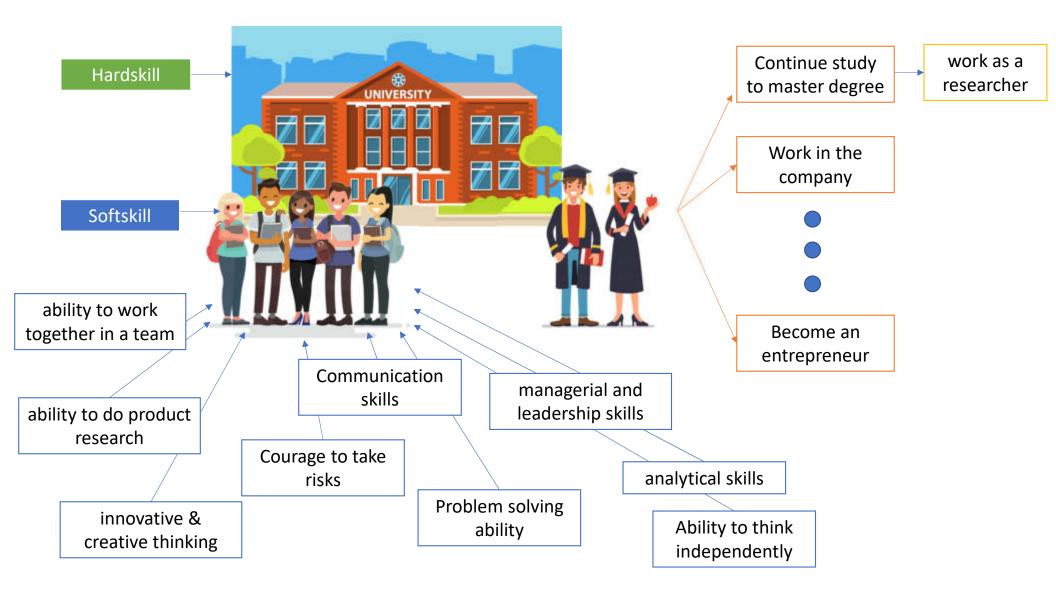


Background

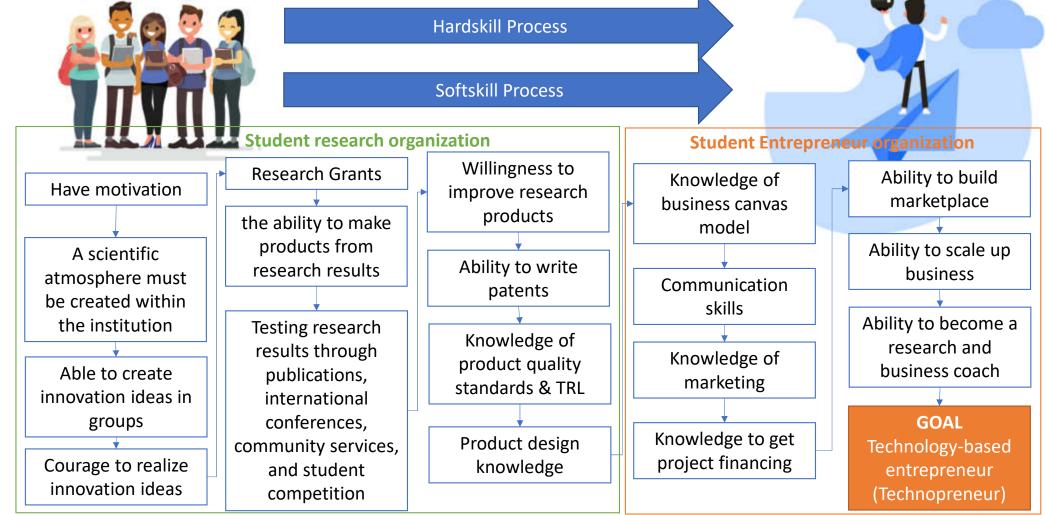
Indonesian Population (2021) = 270 million;

Indonesia (2020): University= 4.593; Study Program=29.413, New Entrants= 2.163.682, Enrolled Students= 8.483.213, Graduates= 1.535.074

In conclusion, Indonesia needs more entrepreneurs who can create new jobs to accommodate such a large population.



How to be a successful entrepreneur student



Creating research and innovation atmosphere for students









Motivation for new students



Workshop on improving soft skills and student research activity



Motivation from successful alumni



Agritech Research & Study Club

 Agritech Research and Study Club (ARSC) was established in 4th February 2004 as an Autonomy Student Body which gather students who are interested in science and technology especially in agricultural technology field.

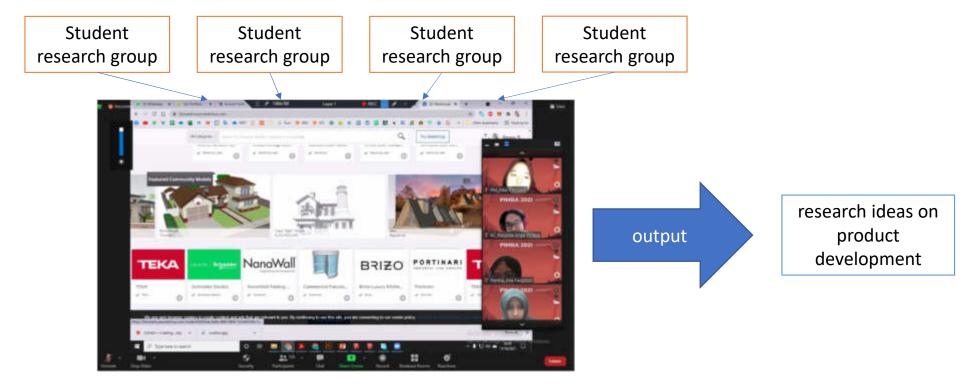


- Facilitate student in the faculty for scientific competition mentoring
- Organizing event and competition related with agricultural science and technology.
- Conducting student research on a specific topic

Webpage: <u>http://arsc.tp.ub.ac.id/</u> Instagram: arscftpub

Student Research Organization Activities

• Idea and innovation brainstorming class



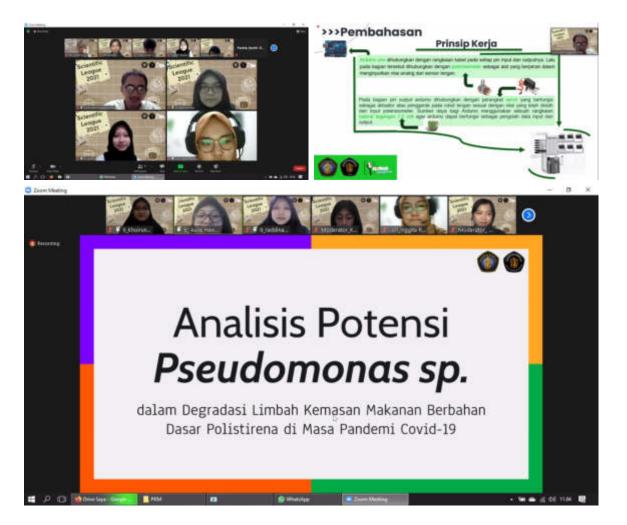
New student scientific competition at the faculty level



New student scientific competition at the University level



SCIENTIFIC LEAGUE



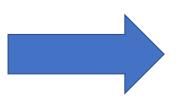
Evaluation Process



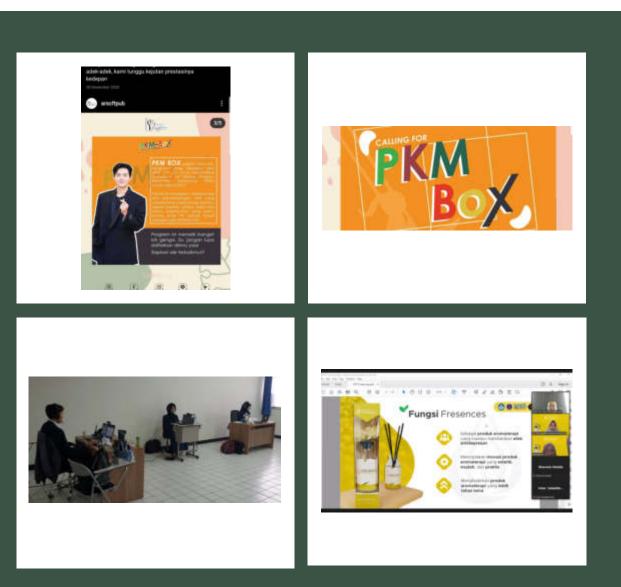


Student Research Grants

- Research group grant from the Faculty of Agricultural Technology, Universitas Brawijaya
- 2. From a government company, Research fund up to USD 40.000
- 3. From ministry of higher education, Research grants up to USD 1.000
- 4. From a private company, Research grants up to USD 5000



The output of the research grant given requires the results in the form of products that can be commercialized, patent registration, scientific publications, publishing scientific books, community service, product expos, and international seminars.



Coaching the preparation of student research grant proposals



Student Research Groups



GULALI: Sinup Glukosa Berbahan Dasar Ubi Jalar Ungu Varietas Gunung Kawi (Ipomee bobotos ver. Gunung Kawi) Dengan Proses Fermentasi Menggunakan Aspergilius niger

Dosen Pembimbing: Prof. Dr. Elok Zubaidah, MP



H Ning Tias



and Transform

Nim. 165100101111021

KM. Picpu Remachanty MM. HEIDINTEI 11 1655

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IN LINCOLLAR

MILKYCHUII (Milk Jelly Tetrasaimis chuil: Functional Beverage with Phytochemicals Extract Tetraselmis chuil for Shelf Life Storage Pasteurization Milk

Desen Pembinibing: Prof. Dr. Elok Zubeldah, MP





Ment Iver Dyah Pristanti Nati 175 (dosci 111010

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Student Research MIMUN (Healthy/Functional Noddle)

- Noddle fortificated with Kepok Banana and Secang Wood as an immunomodulator
- Students Researcher: Naftaly Paskah Pramudya Putra, Putri Danesa Ahmadi, Widya Permata Sari



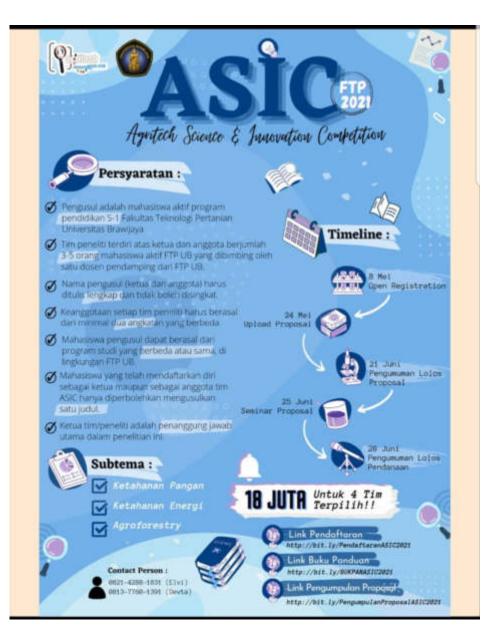
Student Research Maggots Organic Food Supplier Website to Increase Economic Growth and Reach Zero Waste

- Research idea on the development of magoods.id a website as a marketplace to supply organic waste as feed for the maggot for maggot farmer.
- Students Researcher: Verianti Liana, Riris Waladatun Nafi'ah, Alya Alivia Abror, Yoga Aditya Wicaksana, Rio Kevin Marcello Alwi
- 2nd Runner up of Ideas for Action Incubator Competition (National Level) 2021



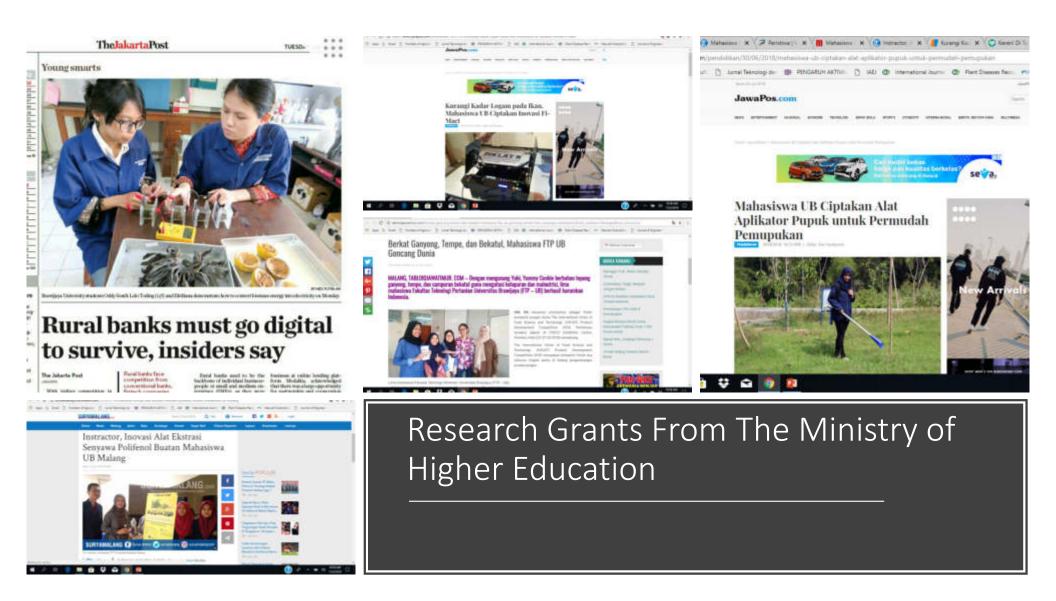
Selection process for student research group grant from the Faculty of Agricultural Technology, Universitas Brawijaya

> ASIC Agritech Science & Innovation Competition



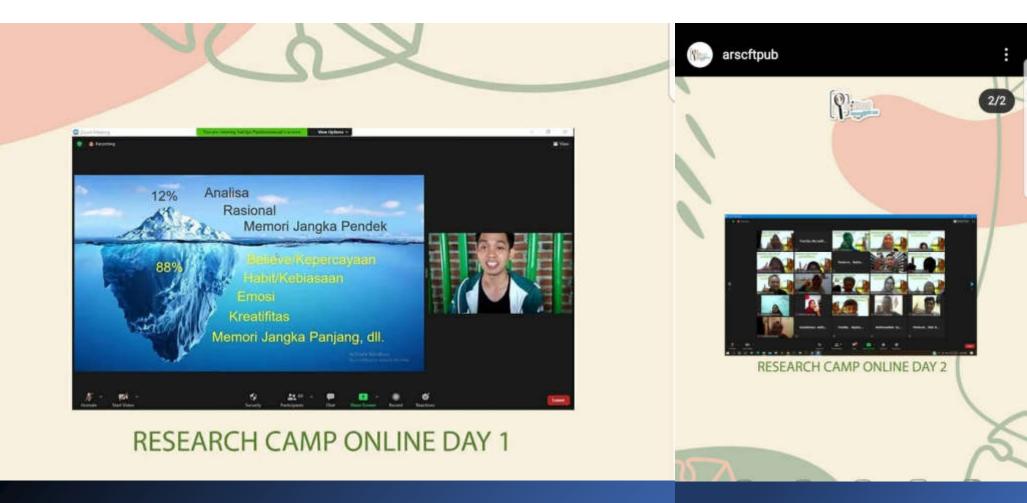
Research Grants From The Government Company





Research Grants From Private Companies





RESEARCH CAMP

Scientific Writing Workshop



Pengenalan penulisan artikel ilmiah



Dr.Agr.Sc. DIMAS Firmanda Al Riza, ST., M.Sc.

Jurusan Keteknikan Pertanian, Fakultas Teknologi Pertanian Universitas Brawijaya 2021



Presentation and Public Speaking Class



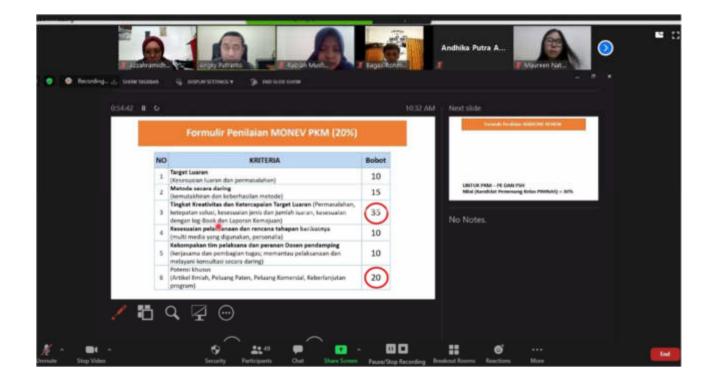


IoT Training Class

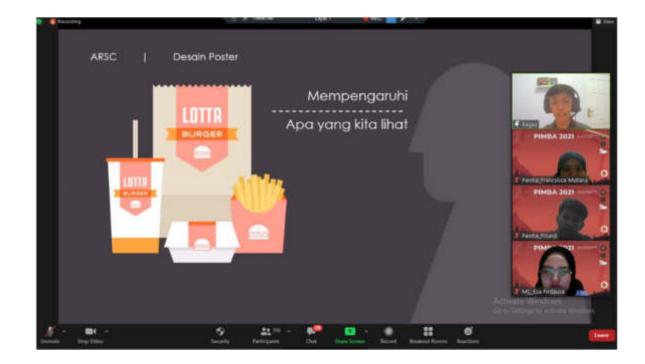




Research Logbook Workshop

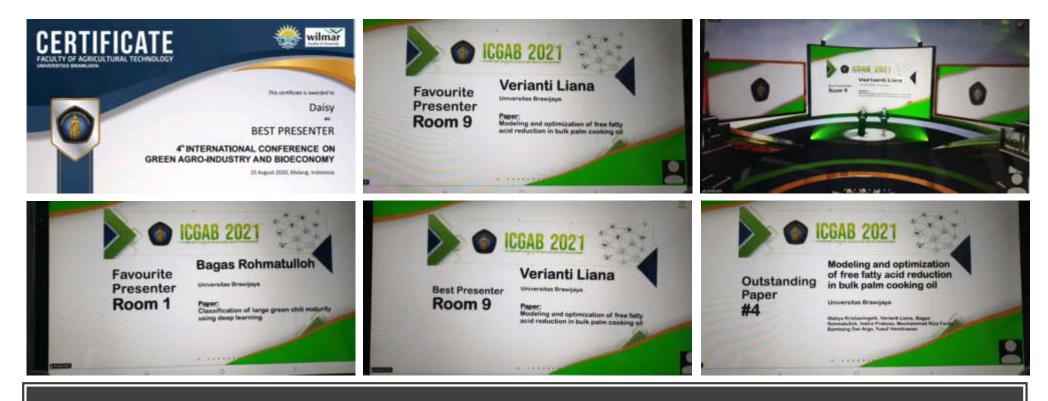


Poster Design Workshop and Mentoring Class





The research product has been realized



Scientific publications through Scientific Journals and International Conferences





National & International Youth Conference

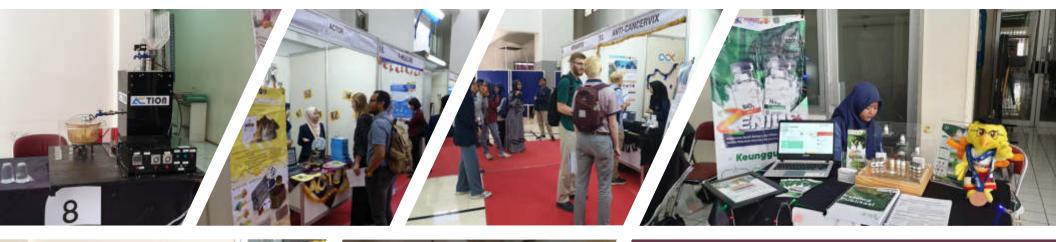
Students as keynote speakers at scientific meetings





Community Service Program by Student Research Group







Product expo by research students (in the faculty)



Student innovation product expo at the national level





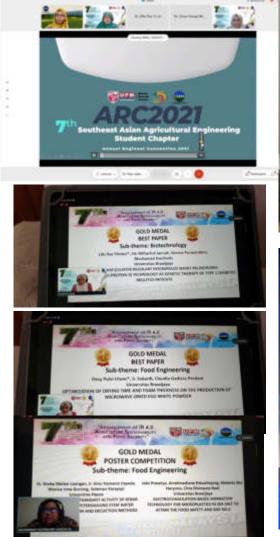
External Expo: Expo of student research products for the community



- 61		
X-AC	GREETION 2022	
	CH RESEARCH AND ENTREPRENEURSHIP INNOVATION	7
·Acceleration	g The Innovation of Agra-Industry Technology and Ben	inner"
	Poster Competition	
TIMELINE	(2) N	
Work Sail 2nd Martin - 32	Menn year Annual and Aventing Concerns	
Registration and Substantion 14 Palments - Tel March 2022	Berlanden Annensent	
SUB THEMES	GUIDES	
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3. Inaligency Apolis/Heating 4. Summahik Agentesany	CONTACT PERSON	
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SUB THEMES	GUIDES	
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3. Creative Hologing 4. Most La freesaler	CONTACT PERSON	10
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Medal - Dertitions	Rama (Q) (-4)) TREELATION (C) samenent	
EDIA PARTNER		Regist Here

International scientific competition held by the Faculty of Agricultural Technology

Research student groups won many awards in international competitions



















• Books produced by student research groups, which are published every year.

ACTION (Automatic Silicon Dioxide Extractor Assisted by Ultrosoun

On Sonication Technology to Realize Indonesia Zerowaste Industr

Design of Silicon Dioxide (SiO2) Extractor from Bagasse Ash Waste B

ULTRONIC : The Application of Milk Pasteurization-Fermentation Technology with Fuzzy La **On UKM SALFARIN MANDIRI, Malang**

Innovators

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ULTRONIC : The Application of Mil Posteurization-Fermentation Technology with On UKM SALFARIN MANDIRI, Molo

Livesteck is one of important sector for economy in Indi-to the data (RPS) the total milk production in Indonesia 920.000 tors, while in Malang the tatal production of 136.000 tons in 2016. Pasteurized and fermented milk is commonly found in daily life. Thus products mestly prod process to kill pathogenic bacteria in order to be oble sumed. In Indonesia, these products are not only produc or factory but thus product also produced by Small and Me (SME). The problem is the SME still use on old or con rocessing. The conventional methods needs a lot of time in p less effective. Litrasound is a device that uses ultrasonic w worke with high intensity, 40,000 Hz, is a methods that use a h the process to inactivate bocterio. While wave with the law Hz, used to accelerate microbe to produce loctic acid in milk a yoghurt faster. The material used are milk, sugar, pot, s eater, temperature control, and thermocouple. The result of is the sample on pasteurization process where milk heater pasteurized by ultresound for 10 minutes, shown notacts redium, while inthe controled milk the total colony cabte two. It shown that the ultracound methods of pasteurization a than the conventional methods. While an fermentation pro from pasteurization process emitted by law intensity ultruso chamber get heated at stable temperature 40-45xC t accelerate producing yeghant from 18 hours to just 4-5 hours.

Easy to use, Multipurpose

Innovators

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ACTION (Automotic Silicon Diexide Extractor Assisted by Design of Silicon Dioxido (SiO2) Extractor from Bagasse A On Sonication Technology to Realize Indonesia Zerowa

Bagasse ash is an abundant waste of sugar indus that waste has been widely used, one of which is extraction process to produce SiO2. The breadth of th making silica with a purity of 99.8% Rp.700,000/kilogram. In fact, silica as raw materia obtained, one of which is bagasse ash waste. Howeve of extracting waste is still a laboratory scale, so it takes Our technology is the design of a SiO2 extractor that automatically. The raw material will react with NaOH control panel to form a Na2SiO3 solution lasting reactor, a solution of Na2SiO3 reacts with HCI to form When reacting with Hcl, the ultrasound panel is turn minutes so, the formation of H2SiO3 gel is more homo can produce high silics purity. With this technology, Il making bagasse into silice ash will be faster, and produ good quality. Sonication technology with a power of 21 increase silica purity when compared to convention addition, this tool is able to opply the concept of zero w

waste thus supporting the zero waste industry concept is automatically controlled, making it more time efficient

Innovators

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Extraction tools with process row materials of

lke Rachmoningtyas Kai



2017.Foodborne diseases can caused by pathogenic bacteria caused Escherichia coli (74,9%).Bacillus cereus(20%) Salmonella(18,4%). Foodborne disease can prevent by detectiv contomination pathogenic bacteria in food. The convent methods still have shortages such as time-consuming, complic and expensive. Therefore, the solution for resolving proble RAPTORS(Ropid Multiple Microbial Detectors). RAPTORS is based bioxensor eaxy for use, portable, effective, and efficien the detection of three types of popular pathogenic bacteria (I B.Cereus, and Salmonella) contain in food. The Princip RAPTORS is the specific reaction between the antigen-anti-

RAPTORS (Rapid Multiple Microbial Detectors) Innova

Multidetection Biosensor Pathogenic Bacteria

in Enhancing Global Food Security

Food is the most important for human life. One a

requirements that must be met from food is ensuring food safet

can avoid diseases. In 2016 there were 2327 cases of

poisoning and increase 4415 cases with 12 death

RAPTORS (Rapid Multiple Microbial Detectors) Innovation

Multidetection Biosensor Pathogenic Bacteria

in Enhancing Global Food Security

Indication positive samples will change color, while neg samples no change color. The sample containing patho bacteria will drap in the platform, the antibody has immobilized. The reaction zone occurs in the reaction bet pathogenic bacterial antigen and secondary-antibodies. It will into result zone, an assay sandwich between antibody-tag enzyme that have a binding with antigen pathogenic boot Then, the addition of BCIP substrates can produce blue color a result zone can see with naked eyes.

Innovation Advar

Rapid detection, portable, easy to use, li

SYLKYWE (Synthetic Leather from Milky Waste)

Alternative Synthetic Leather from Milk Waste

Innovators

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Aplication of I-HEAUNK (Instant Herbal Drink Makin by Vacoum Atomizer Drying Technology in Umi Zainab SME Malang Regency

Aplication of I-HEALINK (Instant Herbal Drink Making Machi

process.

by Vacuum Atomizer Drying Technology in

Umi Zainab SME Malang Regency

Instant Herbol Drink is a provider product which is made b of juice from herbol plants such as ginger, turmeric, curcumin, an The pulverization process is the stoge that most determines products and production efficiency. This Machine is a pulver designed to optimize the speed of the pulverization process are slity of powder products. This Machine uses ultrasonic atomic and vocuum technology which is maintained by controlled her rapidly pulverise for only 3 hours of a kg's product, the results of preserved blooctive content, less energy comumption, and p quality than conventional methods. This Machine works autom easy to use. After the machines assembled and tested, there is which the temperature control, the atomizing speed, the pre pulverization speed, respectively one 80 ± 5oC, 70 cmHg, 1.8 L/h 0.75 hour/kg. The implementation of this technology in Umi Zr. sove time production until 70%, net profit from Rp 2,486,830 to and increase the production quantity until 3 times than the

Implementation of Machine technology in Umi Zair produce a good impact on the existence and prosperity of It modium enterprise. The implementation of technology sha of productivity improvement, quality improvement of instant and directly influence to profit obtained by Umi Zainab SMI show that Machine can increase productivity by 3 times, say time until 70% and increase net profit from 2.486.830 to # than the conventional process. This Machine is widely peolic and Meilium Enterprises (SMEs) in the field of other p products.

Chastita Hikmatun Nisa Achmod Nabhan Yamon Muhammad Hadyan Rohman

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Innovators

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SYLKYWE (Synthetic Leather from Milky Was Alternative Synthetic Leather from Milk Wa Milk is the result of the secretion of the udder or

glands from cottle. Milk contains fats, proteins, lactose, various types of solt and vitamins. Each kilegram produced produces 8-9 L whey: NATA products become t development options to reduce the number of polluto whey waste. The use of milk waste as a nota de milky pra promising patential, but the absorption of the commun the use of Noto de milky products is still low. Therefore it is a form of use that has a high absorption by the C therefore noto de milky can be formed into a synthetic les This research consists of two processes namely the ma (fermentation) note de milky and the feeder de milky to synthetic leather. The fermentation process of nata de Mi by two treatment factors, namely in comparison between of milk and coconut water by comparing the milk wash water (1:2; 1:1; 2:1) and the factor of the starter with two and 10%! Where to use 4 times the loop with Tatl 6 treats that has been done in tanning process using fitanium. analysis used by the group Random Plan (RAK). The parar will be observed are in terms of color, texture, strength of flexibility or electicity, and absorption of water.

Innovation Adv

Synthetic Leather from /

Innovators

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AFATAR (Automotic Filling Water from Water): Inn of Water Harvesters as Clean Water Supply Sali

AFATAR (Automatic Filling Water from Water): Innovation

of Water Harvesters as Clean Water Supply Solutions

TEC (Thermo Electric Cooler) is a technology that wh electric current flowing side of the themselectric module will experience heat while on the other module side will excold. This technology has enormous potential for water he by condensation process. In this study a water-harvestin will be mode by the incoming air method will be conden thermoelectric that will generate water points on the heat accommodated. The ultrasonic sensor will switch off the a when the container is in full state. This appliance uses sold in power granting for device component activation. The conducted for three days by measuring a lat of wat Dissolved Solids (TDS), and pH in the resulting water and in the test area. Research shows that air harvesters can pror milliliters of drinking-water per day with an average hs 80%

Innovation Art

environmental friendly, automatic, can produce drinki









ACTOR: Design Of Aerobic Bioreactor As An Effort to Increase Value Of Rabbit Feces

Innovators

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OSMOTECH

Eggs are a very large livestock cammodity in Indonesis. Eg nter are chicken eggs, ducks and spasil. East Java Previo commutity producing provinces. However, the high number of bolanced with the emount of consumption of each person. Base the Central Statistics Agency (2014), it was shown that quality per capito in 2011 was 30.71 items, in 2012 as many as 30.96 ite 32.39 items annually. The lack of egg consumption will create a c many eggs are not consumed as that the eggs will be closed a from consumers. Though eggs have a weakness that is a physically and shemically caused by the presence of microarger the egg through the pares. The many pares make it sester for any enter the egg. So that the stored eggs will be domoged and conn again. Therefore, a certain method is needed to preserve the equ of egg processing methods that can extend the shell life of eggs a ption by the community. The method we offer is proce Revenuel ways using oppropriate technological innovations a pressure carriesis detryshotion. The use of the technology we affin increase the selling value of eggs. Besides that the production pro takes 5 hours for 330 chicken / dock eggs and 2 hours for 1000 gu the productivity of this business very high. The Bovors offered a reven and gulai. The material particles used will be able to close egg which makes the processed eggs have a much langer shell U will be used to enlarge the scale of production that will be a renewal and increase production capacity and expansion supported by digital marketing.

novation

The use of the technology we offer will be able to inspevalue of eggs, Besides that the production process which only to 330 chicken / duck eggs and 2 hours for 1000 qual eggs mokes aft this business very legh.

Innovators

Hairil Fiqri Adzani Ghaisani Arda Khadijah Adrebi

Advisory lecturer

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"ANTI-CANCERVIX": Exploration of Syzy cumini as Potential Cervical Anticon Based on Sasak Traditional Medici

Sasak tribe are treating concer traditionally n ancient manuscript for healthcare, Usada. There are diseases using 11 types of animals and 163 types of it medicinal plants. One of the plants mentioned in the Java plum (Syzygium cumini). The purposes of thi determine the best extraction solvent comparing methanol and water, recognising flavonoid and ph through thin-layer chromotogrophy, total phenolic Ciocalteu assay, functional groups by the fourier tran spectroscopy, the IC50 (% of inhibition) value from DP activity, and the IC50 of HeLa cell line by MTT ass obtained from TLC showed that all fraction estima amentoflavon and gallic acid compounds. Total pher ethyl acetate, methanol and water fraction are 26,19 ± 0,28; dan 2,31 ± 0,11 gallic acid equivalen respectively. FTIR result showed the existence of p alkene, nitro, aromatic ring and ketone functional an valueof DPPH assay of ethyl acetate, methanol, wat ascorbic acid (as standard) are 90.44 ±16.34; 12 173.30 ± 4.20; dan 64,48 ± 21,88 µg/mL respective assay by MTT showed the ICSD value of ethyl acet water fraction and cisplatin (as standard) are 98,76 98,71 ± 0,34 µg/mL, 98,55 ± 0,16 don 105,13 ± 0,1 According to the resultsshowed that Syzygium cumini to become a new source of antiaxidant and anticancer

Innovation

Syzygium cumini has a potential to become a r antiaxidant and anticancer compound

Innovators

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ACTOR: Design Of Aerobic Bioreact As An Effort to Increase Volue Of Robbit

Rabbit are an unimal has arrive body provides benefits volue. Productivity of robbits in Indonesia each year reaches consisting of brodler subbits and armamental rabbits. Some a rabbit in Indonesia is dominated Java Island such as Lemite lawangmangu (Center Java), Sarangan and Batu (East Java data from Departement Agriculture of Batu City productivity of to 2014 decreased from 32,833 to 26,035 toJa, This condition rabbits has fluctuating domand and low economic value. One to increase economic value of rabbits is use rabbit lease into a Compositive can be done using conventional methods, but th weakness in terms of time because temperature and hum optimal values. Based on thes reasons, a new method fo needed which is equipped temperature and humidity cant composting time is sharter. With a shart composting time in upt more compast can be produced and balanced with better previous method. So, if this hoppens the economic value of rat increase and more profitable. ACTOR is an involvative compo herizantal cylinder take. This tool is equipped with temperatu centers. If the temperature is high, center will turn on the worh humidity high, center will turn on the fan. The use of ACTOR with a chamber to hold compact from a horizontal sylinder tub diameter 35 cm, length 80 cm with a capacity 70 kg. Chember of 6 piles and in 1 pile has a length 120 cm, width 100 cm ar ACTOR combain with composit storage with fail temperatu control. Number of piles can be adjusted according to reequipped a temperature and humidity censor, and can b chamber.

Innovotic

The time compasting faster, around 7 days, increprediction, can produce 50-70 kg each day, compoautematization control system thet can resintain temperature comparts material, and increase qualities of compast

Organoleptic and Glycemic Index Test Of

Sorgum Bar Products with Various Types Of Nira

23

HALLON BREAD (High Calcium, Rich Antiaxidant and Low Gluten Bread) Enrichment of Arrowroat Bread with Ferment Eggshell Powder and Apple Peels Extract for Type 2 Diabetic Pati

Innovators

Muhammad Yuda Dwitama Agustian Elinna Primadiani Choca Nugraha Zaid

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HALLON BREAD (High Colcium, Rich Antioxide Lave Oluten Broad) Enrichment of Arrowroot Broad w Egyshell Powder and Apple Peels Extract for Type 2 5

mawrout is known as one of local raw material in led uses for gluten-free bread with rice and comstarch. Gluter important for type 2 diabetic patients because of law glyce However, the presence of gluten-live product is not ever subilitional value. They also need high column to prevent a articuldant to prevent another risk. Olicken eggshell conto authorate (98,2%) which is leadable. Calciam ian from calcia orm a band to lactic acid and form a algertible lactic cabio Remanded with L. plantarum. Moreover, eggshell has the i which also partile parvarted into bisactive protein hydrolyse apple widely-grown in Baty City. It contains high antioxidant e which is good to prevent free radicals that become the main and condiac diseases. HALLON IREAD is gluten-free bread amperpat, rice and correstarch which is added by hermented and apple peels extract. The experiment consists of 2 for chicken eggshell provder und opple peels extract cancer evoluction, nutritional value and amount of colcium are colo shewed that gluten free breed enriches with fermented egg increase the number of colcium loctate and couste the protein helps lower glycernic index with better supermarks compared Apple peaks also anrich the Bavor and give quercatin up to reg/L towards the bread

Innovati

HALLON BREAD is a special low gluten brend, been ability to prevent desense tamples that advant by type 2 46 HALLON BREAD mode turns antownoil and some induction we and oppel peel. Formanted aggited/contained in HALLON B decreasing of glycanies index and increase the setubility of debatic patients.

Innovators

Nur Avidha Surayya Maulidia Hilaili Elvia Rahmawati Elinna Primadiani Jamaludiin Asy Syauqi Anggara Nur Rushydi

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Organoleptic and Olycemic Index Test Sorgum Bar Products with Various Types O

Type 2 Diobetes Mellitus (T2DM) case in Indones International Diabetes Federation (IDF) was up to 10 millio it was ranked as the second diabetes case in western-pasifipredicted to increase to 21,25 million cases by 2030. The T2DM prevolence and prognosis is caused by imprope especially for high glycemic index food. Bland sugar levelsby consuming food that has a law glycemic index : hydrocallaid, ar resistant starch. Sorghum is a local food high resistant starch and proprihacyanidis (flavonoids) protective effect on pancreatic heta cells and improve ins This condition can lead the potency of sarphum to be a fund T2DM. The production of sorghum in Indonesia is was up 6000 tons per year. Sorghum also has about 3.26% water c protein, 3.2% fat, 10.34% fiber, 73.00% carbohydrate, and about 332 col per 100g, sarghum can be proceed as sorg extrusion method to increase the consumption preference sorghum stem juice also can be processed into coramal. If as chalating agent in sorghum bar, because it has a low IG This research was canducted by organaleptic and glycemi on sorghum har products formulated with sorghum puffsorghum stem juice as shelpting agent. This treatment ma distinguish with onother sorghum bar formula that made poll and nirs from super cane. The purpose of this redetermine the effect of consumption sorghum bay which a alternative food solutions for people with T2DM. It is exp testing of some of the nira can get the right formulatio products can compete in the market.

Innovation .

the product has a hypoglysemic effect low (

C-PROVINE (Crops Improving Quality Machine) : Post

C-PROVINE (Crops Improving Quality Machine) : Post Harvest Handling Tool to Reduce Aflatoxin Of Nutmeg Based High Electric Pulse and Ultraviole

Innovators

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C-PROVINE (Crops Improving Quality Machi Harvest Handling Tool to Reduce Aflataxin O Based High Electric Pulse and Ultravi

Notney (Myristica Insyrans Houtt) is a high economic v that is one of Indonesia's main export commodities. Until new, world's largest producer and supertur of nutring with 99%. production obtained from smallholder plantati threatened due to the presence of Aflatoxin which is toxic and and decline in the export of Indonesion notmog on the interr Generally, treatment in reducing effectual by immersing amma hydraxide, but requires a lang time, decreases sensory pro-sharacteristics, and is at rick for health. Far this reason, innovati post hervest handling tools to reduce offatosin levels in a shu wally of products that can compete, namely the Aflatasia Based on High Electric Fulse and UV. The purpose of this study v the efficiency of the tool, the average output veltage, econo characteristics of the treatment results, water content, and to aflatavist achieved. The results of the design of this tool are ab sixture content of nutrineg to 8.2%, by displaying a fixed color c ABptaxist reduction levels reached B4, 64% so that it w conventional and chemical methods. This tool is based on High I UV consisting of 3 main parts, namely the box system dryer. This tool has a stable extput veltage at 40-50kV concentration reaching 32.5%. So that it is optimal in reduc addition, post harvest handling tools can accelerate the decrea times letter then conventional methods.



Fest-processing about 35 minutes, able to reduce all 84.64%, using sami-actionatic control system that focilitates decreasing affatosin levels, fees not affect physics-cher parameter's

STRIBER (Sansevieria trifasciata Bio Air Filter and Freshener):

Product Innovation of Aromatic Pollutant Filter as

Effort to Create Pollution-Free Environment

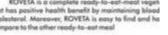
ROVETA (Ready to Eat Meal for Vegetarian): Complet Meal with Vegetarian Rendang, Modified Rice, and Blanched Veggies

ROVETA (Ready to Eat Meal for Vegetarian): Meal with Vegeturion Rendang. Modified Rice, and Blanched Veggle

Many people choose to be vegetarian due to I ROVETA is a complete ready-to-out meal for any va vegetarian. ROVETA is a combination of Konjoc g (KGM) modified rice, blanched veggies, and im rendang. Imitation meat rendang made of banana I jackfruit, and isolated say protein. While modified rice KGM. The result is ROVETA contains protein 15.48%, 12.56%, total fat 23.59% with a law calorie. There could be convenience food to fulfill vegetarian's daily in



ROVETA is a complete ready-to-oot-meal veget that has positive health benefit by maintaining blood cholesterol. Moreover, ROVETA is easy to find and ha compare to the other ready-to-eat meal



Advisory lecturer

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Innovators

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Faudina Nurin Nisa

Maharani Dewi Utami

Nanda Triachdiani

Nur Aisya Indiani



STRIBER (Sansevieria trifasziata Bio Air Filter and I Product Innovation of Aramatic Pollutant Filb Effort to Create Pallution-Free Environment

Air is one of the important components for humans with 8 kg/day. However, currently, global air quality is very alarmi cilution level exceeds 2 times the recommended level, whit PM25. The types of pollutants in the air are 70% cortion menorie plumbum (Pb), 60% hydrocerbons (HC), and 60% nitragen axide ratine and others. Therefore, the solution and inm "STRIBER Sonsevieria milasciato dia Water Fihar and Frashe Innovation of Aromatic Pollutant Filter as Effort to Create Environment'. STRIBER is a natural pollutant absorbent and filter form with addition of skin Lime all. Somevieria trifascita leaves e pregnone glucoside active substance that able to absorb and de pollutants such as carbon monoside, shloroform, benz moldehyde and trichlorotylene into hormless compounds organic ocids, sugars and same amina acid compaunds. Th Completely Randomized Design (CRD) with 2 factors, the Semevieria trilascito lauves extract (M1: M2: M2) (35:40:4 ortion of corregemon-keeps K1: K2: K3 (15:10:5) g. T making STRINER includes heating of distilled water to a tempe then adding a minture of Sansevieria trilascita leaves extract, kappo, 0.05% natrium berasate, and 50% aquades. After the migel, then cooled to a temperature of 65°C. Add 2% line ski propylene givest and stir until hamogeneous. After the run, pour it into the container and cooled for ± 2 hou is formed. The hest treatment results were K2M2 (45-5 grant) with value of 1.79%, a decrease in weight of 35.89%, evaporatio 27.08%, has a fregrant resistance for 4 weeks and absorbe provide you as much as 44-21%. The advantages of STRIBER on in filtering pallutants, has a refreshing aremo therapy, and is safe

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STRIBER is an eco friendly product that value for human h-STRIBER is made without any hazandous chemical. Applying environment can making environment become healthier and then that, STRIBER is easy to one and have a law price.



MOMIE (Modified Sorghum Mie) Free Gluten: realizing a fostering a local food culture as an effort to achieve Indonesian food security 2030

Innovators

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MOMIE (Modified Sorghum Mie) Free Gluten: re fastering a local food culture as an effor achieve Indonesian feed security 203

Noosfle is one of the food products made from flour as China. Noedles are a type of flour precased feeds that are a by most indonesian people. However, the row material towhich is an imported food product. On the other, Indones regetable which can be a raw material for making needle sorghum. Currently the utilization of sorghum is not maxime involedge about processing modifications so that it is a tureign countries. From the description alsove, MOMIE () Noodle) was created with high fiber and nutritional content : for diatory consumers who have solid activity. In addition, ourned by people with celler disease because it is glute protein that can be found in instant noadles in gen Sorghum Naeidle) is packaged in practical, hygienic and east so that it can be consumed by all groups. Includes making so mentation process then making starch poste. The neul additive solution, namely CMC and Xanthon Gum solution. 1 manufacture of alough, raller, cutting, to produce dry ner MOMIE products. The results of MOMIE products have passe tests through hedenic tests to determine panelisty profe-products. This product innevation is espected to increase th local foast and faster a culture of local food consumption o National Food Security will be achieved in 2030.



Morrie (Modified Sorghum Mie) is produce with Iscal (indonesian served, so it can contributing to minimaxe in Indonesia. Monie was produce with fermentation methode sorghum. Montie is innovatien mie that high nutritional value protein. Marrie increasing diversification of local food. Mor grow up least fixed culture

Innovators

Febiani Dwi Nursyaputri Wahyu Anita Sri Lestari

Koren Bunga Hariyani

Mariatul Qibtiyah

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Patent Training, Intellectual Property Rights Training, and Home Industry Food Standardization and Licensing Training





The highest student patent registration award at the university level



Universitas Brawijaya achieved the highest number of patents in Indonesia

Permohonan Pendaftaran Paten Dengan Jumlah Tertinggi Selama Masa Pandemi Kategori : Universitas

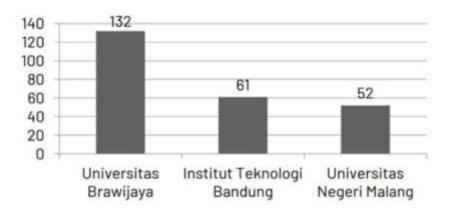


Foto: istimewa

Malang - Presiden Jokowi memuji Universitas Brawijaya (UB) yang mampu mengajukan 132 paten selama pandemi COVID-19. Apa saja paten yang diajukan itu.

Ketua Sentra HKI Prof Dr Ir Elok Zubaidah memaparkan 132 paten yang diajukan meliput berbagai macam produk teknologi, baik menyangkut proses, metode, maupun formula.

"Ada banyak macam produk teknologi, dari 132 paten yang telah diajukan itu. Baik mengenai proses, metode, maupun formula," terang Elok kepada detikcom, Selasa (5/1/2021).

Research products by students of the Faculty of Agricultural Technology were selected in the list of 109 Indonesian innovations

Karya Mahasiswa FTP Terpilih dalam Daftar 109 Inovasi Indonesia Terpilih 2017

Difulia pada tanggal 11 Agustus 2017, oleh Dyah Sushanty, pada kategori News

Mahasiswa Fakultas Teknologi Pertanian Universitas Brawijaya kembali membawa kabar membanggakan. Dua karyanya terpilih dalam Program 109 Inovasi Indonesia tahun 2017 yang diselenggarakan oleh Business Innovation Center (BIC) didukung oleh Kementerian Riset, Teknologi, dan Pendidikan Tingggi. Keputusan ini diumumkan dalam peringatan Hari Teknologi Nasional yang diperingati setiap tanggal 10 Agustus.

Setelah melalui proses penilaian oleh 36 juri yang menilai 12 kategori teknologi, kedua karya para mahasiswa inovator FTP yang terpilih tesebut adalah "AUTHOR (Automatic Bee Propolis Heat Ekstraktor) Inovasi Rancang Bangun Ekstraktor Propolis Berbasis ReHeater (Resistive Heating With Vacuum Filter)" dan "ETROVICE (Electroculture Vegetable Device) Teknologi Tepat Guna Berbasis Cahaya

Monokrom dan Sonic Bloom untuk Meningkatkan Laju Produktivitas Sayuran di Indonesia".

AUTHOR (Automatic Bee Propolis Heat Ekstraktor) merupakan suatu penelitiun karya Annisa Aurora Kartika (THP 2015), Rio Bangga Indriawan (TEP 2015), Ahmed Alwy Al Azmi (TEP 2014), Mindy Septian A.K. (TEP 2014), Vindy Septian A.K. (TEP 2014), Vindy Septian A.K. (TEP 2014), Serta Nada Mawarda Rilek (TIP 2013) dibawah bimbingan Joko Prasetyo, STP, M.SI. AUTHOR mengkolaborasikan teknologi pemanasan resistive heating dengan vakum filter secara



otomatis yang sangat efektif diaplikasikan pada ekstraksi propolis di peternakan lebah madu. AUTHOR mampu memangkas waktu yang diperlukan pada ekstraksi propolis dari 72 jam menggunakan metode konvensional hingga hanya menjadi 6 jam berkat inovasinya.



Sementara ETROVICE (Electroculture Vegetable Device) adalah penelitian karya Sintya Laylie M (FTP, 2015), Danar Wicaksono (FTP, 2014), Khurun In Nur K (FTP, 2014), dan Aziz Iman W (FTP, 2014) yang



Product Commercialization Preparation & Technology Readiness Level Measurement



Agritechno Business Centre

 Agritechno Business Center (ABC) is an Autonomous Student Body in the Faculty of Agricultural Technology which is engaged in entrepreneurship. This institution was founded on February 29, 2012 and was inaugurated on March 31, 2012.



- Facilitate student in the faculty for entrepreneurship mentoring
- Organizing event and competition related with entrepreneurship.

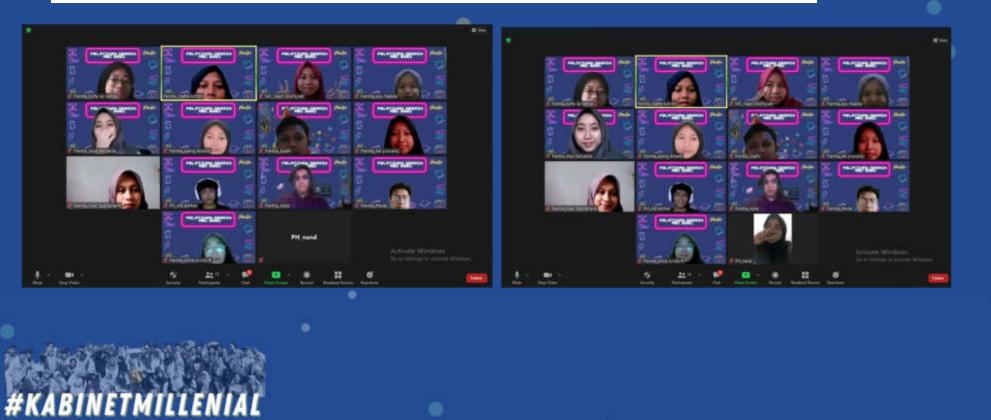
AGRITECHNO BUSINESS CENTRE

Webpage: <u>http://abc.tp.ub.ac.id/</u> Instagram: abcftp.brawijaya



Business Training AGRITECHNO BUSINESS CENTRE

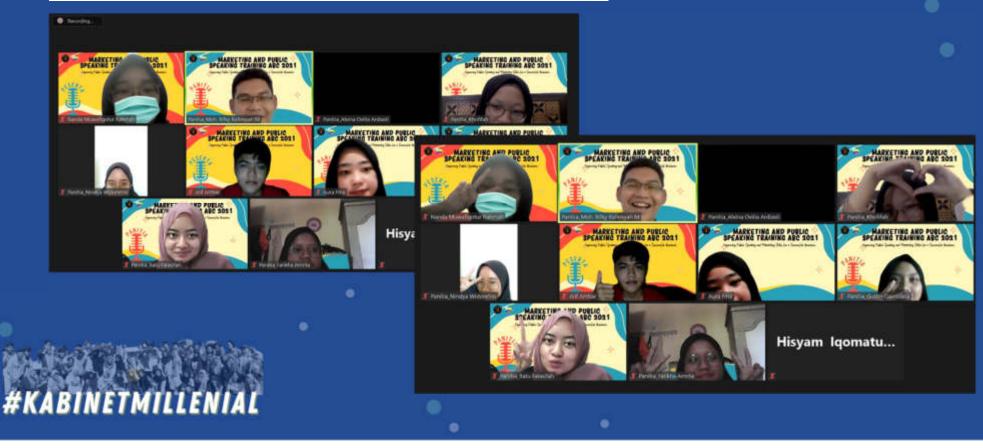
Business plan training, business canvas model, product design, etc





Marketing Training AGRITECHNO BUSINESS CENTRE

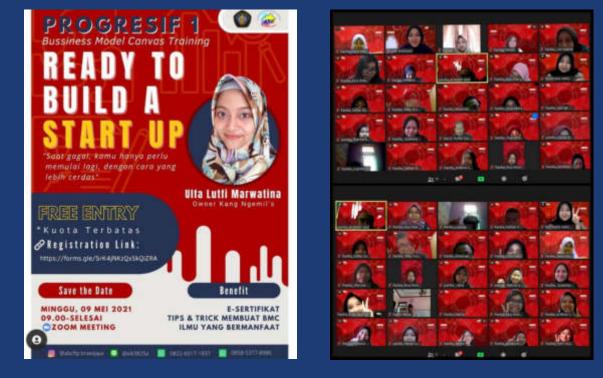
Marketing and public speaking training





Start Up AGRITECHNO BUSINESS CENTRE

Build a Start Up Workshop



#KABINETMILLENIAL

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NAFTEX 2021 AGRITECHNO BUSINESS CENTRE

Faculty and student entrepreneurship organizations hold business competitions to get input and improvements for products to be commercialized

#KABINETMILLEN







Entrepreneurship Funding

Coaching to get entrepreneurial project funding from **Universitas Brawijaya**







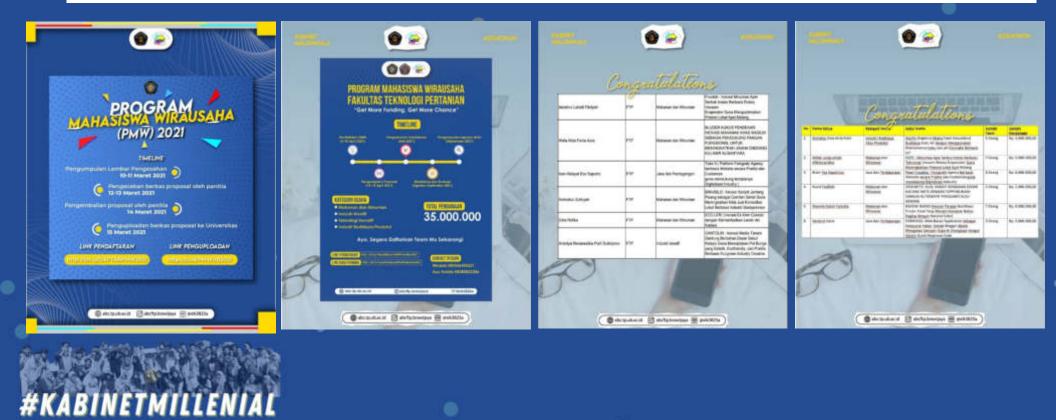
Entrepreneurship Funding

Coaching to get entrepreneurial project funding from **Faculty and Ministry of Higher Education**



Entrepreneurship Funding AGRITECHNO BUSINESS CENTRE

The selection process for funding entrepreneurial students from faculties and universities



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#KABINETMILLEN

Entrepreneurship Funding

Funding entrepreneurial students from Ministry of Higher Education



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The process of evaluating the implementation of student entrepreneurship projects



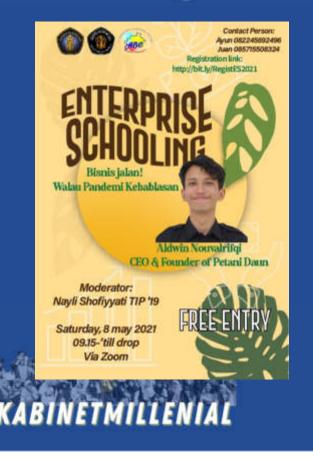


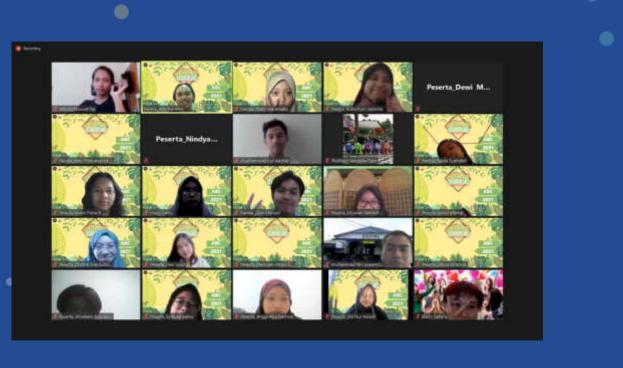


ENTERPRISE SCHOOLING 2021

AGRITECHNO BUSINESS CENTRE

Workshop activities to increase business scale





6

Funding for student entrepreneurship projects can be continued on a larger scale facilitated by Ministry of Higher Education

- TECHNOLOGY BASED PROSPECTIVE STARTING COMPANIES (up to USD 20.000)
- TECHNOLOGY BASED STARTING COMPANIES (USD 50.000 to USD 100.000)

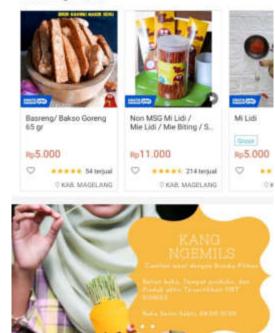




Some examples of student research products that have entered the marketplace



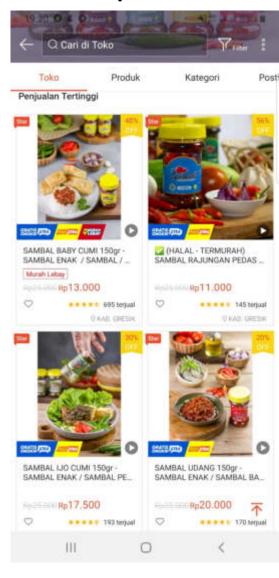
Kamu Mungkin Suka

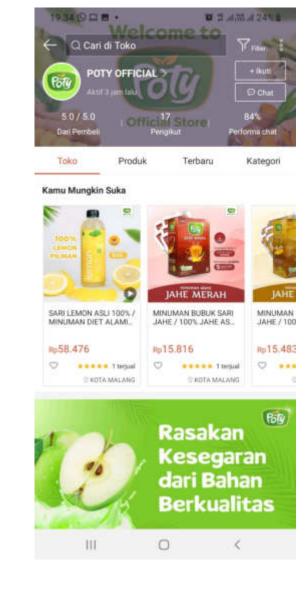


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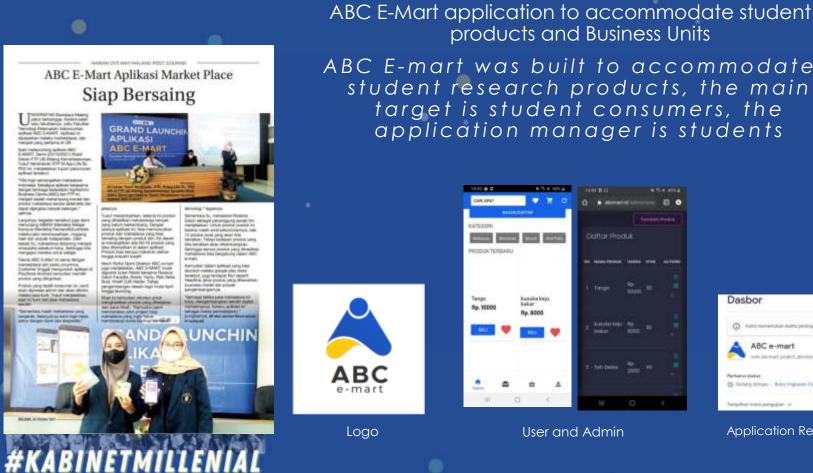




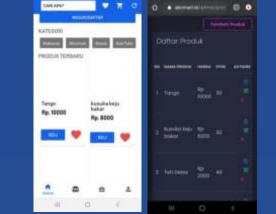


ABC E-MART Application

AGRITECHNO BUSINESS CENTRE



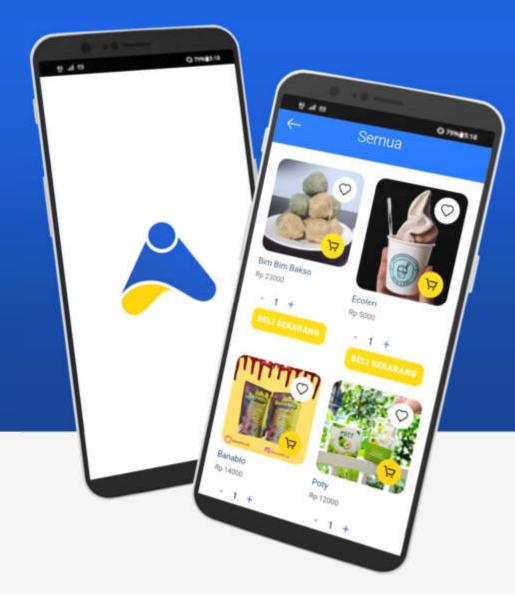
products and Business Units ABC E-mart was built to accommodate student research products, the main target is student consumers, the application manager is students



User and Admin



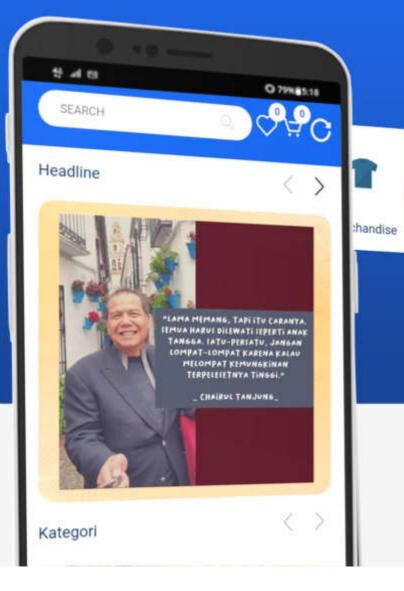
Application Registration to Google Play Store



ABC E-Mart

Student product marketplace Faculty of Agricultural Technology Universitas Brawijaya





Our Feature's

- Product
- Blog
- Category
- Headline



Headline

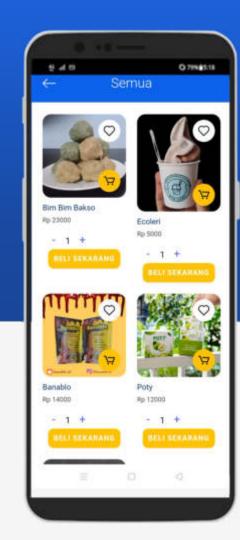






POTY Minuman Apel Serbuk Instan merupakan produk minuman segar yang dibuat dari apel pilihan terbaik di Malang, dengan proses produksi yang ketat dan terjamin keamanannya. Setiap pembelianmu turut serta dalam membantu mengoptimalkan hasil pertanian apel, jangan sampai kelewatan untuk berkontribusi dengan mudah!! Mengapa harus POTY Minuman Apel Serbuk Instan: - segernya alami, -100% gula sali, diolah dari apel pilihan, - kaya kandungan vit C



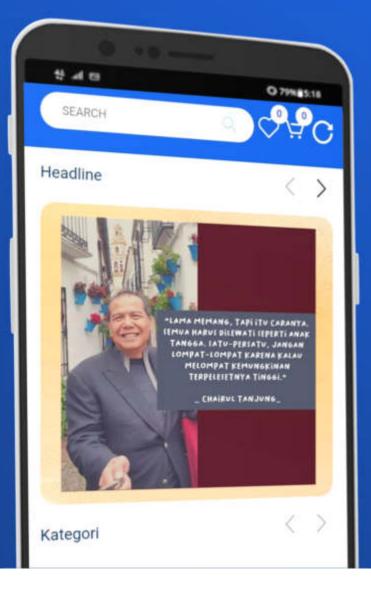


Product

- Headline
- Blog
- Category
- Product







Our Rhetfortion

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Workshop on The Training of Trainers (ToT)





Faculty of Agricultural Technology is the first faculty at Universitas Brawijaya to graduate students with entrepreneurship final project



Thank you