

VIVEKANANDHA COLLEGE OF
ENGINEERING FOR WOMEN
(AUTONOMOUS)

ELNNRDFLY

DEPARTMENT OF
BIOTECHNOLOGY

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"Vidhya Rathna"

**Prof. Dr. M. Karunanithi, B.Pharm., M.S., Ph.D., Litt.,
Chairman & Secretary
Vivekanandha Educational Institution & Hospitals
Tiruchengode & Sankari**





FOREWORD

With great pleasure we present "Lyf Drizzle," our magazine. The Head of the Department, teaching and non-teaching faculty, and college management have all given their approval for this Magazine preparation. There has long been a demand for understandable sketches to display our students innovative contest entries. Through my experience editing this magazine, I have seen that the students in our department have a great deal of potential and skill, and they require a platform such as this one to help them develop it. At this point, I would like to remind everyone that without the efforts of our team, it would not be possible to support the students participating in such amazing activities. Our department is expanding, and I can see it in the maturity of our students and their commitment to publishing this journal in good condition. We would continue to present the following issue in an efficient manner.

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EPITOME

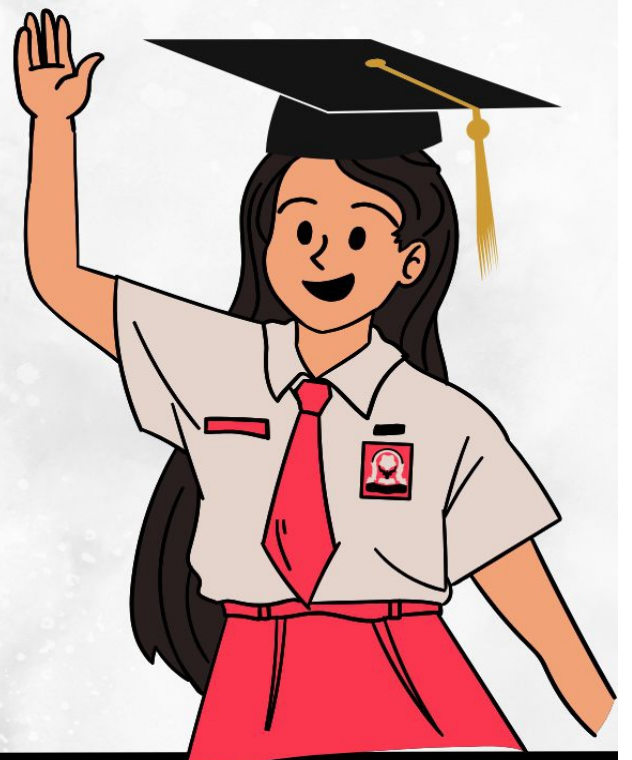
STUDENT PUBLICATIONS
GAB FEST
BRAIN WAVE
FORTEE SOLACE





STUDENT

PUBLICATIONS



**BIOPLASTIC PRODUCTION USING ALOE VERA GEL
AS PLASTICIZER: A SUSTAINABLE APPROACH**



RESHMA M
(2020-2024)



KANIYAMUDHU V
(2020-2024)



SHRUTHIKA K
(2020-2024)

CURRENT WORLD ENVIRONMENT



**COPPER PURGING FROM INDUSTRIAL EFFLUENT BY
ADSORPTION USING Fe₃O₄/MnO₂ NANO COMPOSITES**



PRASANTHI K
(2020-2024)



PRAVEENA J
(2020-2024)



INDHUMATHI G
(2020-2024)

EFFLUENT TREATMENT BY *OEDOGONIUM SP*



RUTHIRA P
(2021-2025)



MEENA M
(2021-2025)



SAMITHA S
(2021-2025)

**WORLD JOURNAL OF PHARMACY AND
PHARMACEUTICAL SCIENCES**



**ADVANCEMENT IN BIOGAS PURIFICATION TECHNOLOGIES:
A COMPREHENSIVE REVIEW**



DHANUSHA A
(2020-2024)



NIVEDHITHA B
(2020-2024)



JEGAJOITHI P
(2021-2025)

STRAD RESEARCH JOURNAL

**INVESTIGATION ON WASTE TO BIOGAS
CONVERSION: A COMPREHENSIVE REVIEW**



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(2020-2024)



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(2020-2024)

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH



**TOWARDS A GREENER FUTURE: BIOREFINERY
APPROACHES FOR SUSTAINABLE ALGAE-BASED
PRODUCTS**



DEVIKA R
(2021-2025)

BIOFUELS AND BIOENERGY (ELSEVIER)

**FOOD WASTE VALORISATION: A PATHWAY TO
SUSTAINABLE PRODUCTIVITY AND ENVIRONMENTAL
STEWARDSHIP**

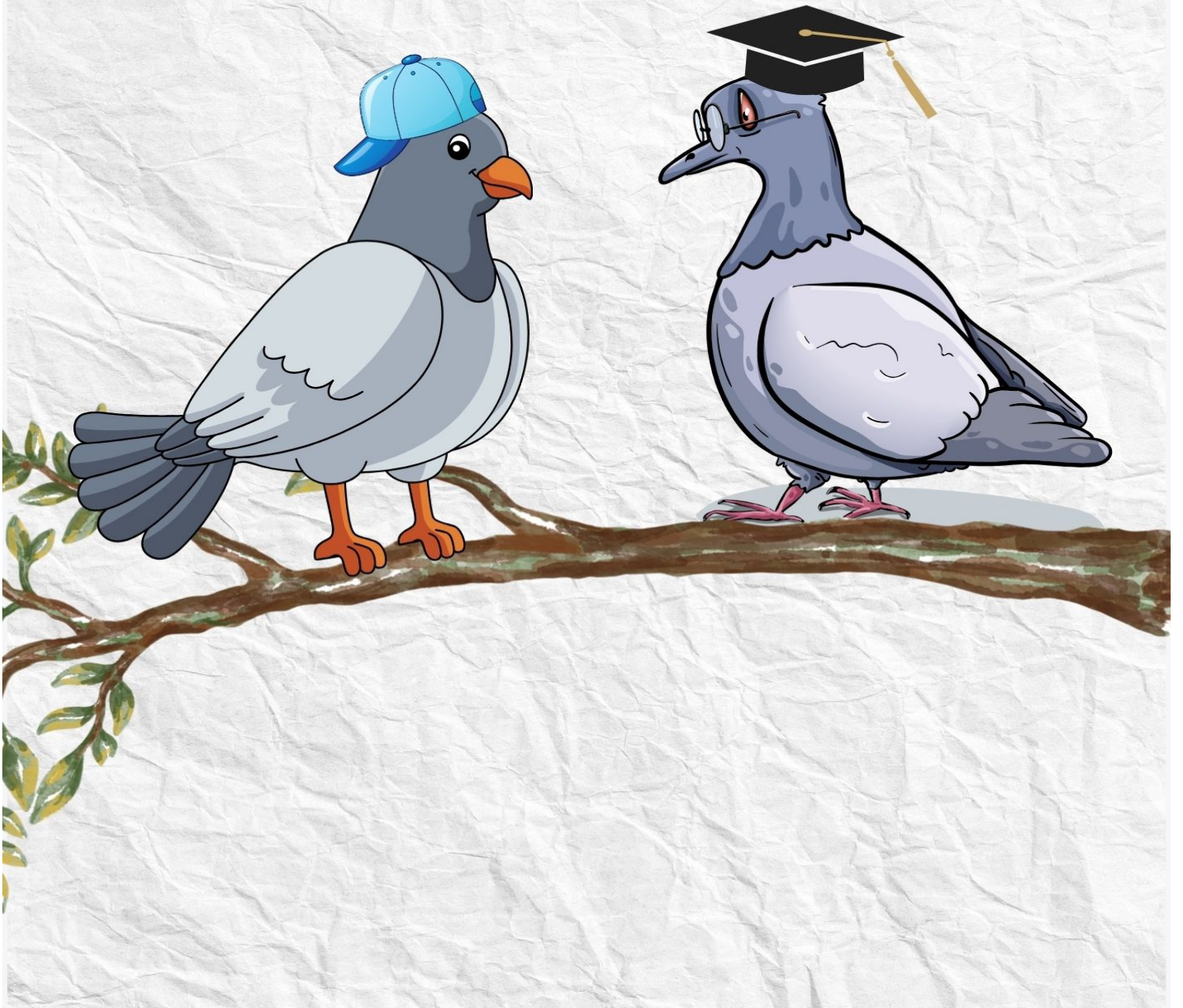


RUBINIKA P
(2021-2025)

AFRICAN JOURNAL OF BIOSCIENCES



GAB FEST





Myth : Organic food means it's free from biotechnology.

Truth: Organic farming avoids genetic modification and synthetic chemicals, but it still relies on biotechnology like microbial fertilizers and composting techniques. Biotechnology is not limited to *GMOs*.

Myth : Vaccines are dangerous and can cause autism.

Truth: The idea that vaccines cause autism has been thoroughly debunked. The original study suggesting this connection was retracted due to fraudulent data, and subsequent research has found no connection between vaccines and autism. Vaccines are safe and crucial in preventing serious diseases.



Myth : Humans only use 10% of their brains.

Truth: The "10% myth" is a misconception. We actually use virtually all parts of our brains, though not all at once. Different areas of the brain are responsible for different tasks like movement, memory, language, and decision-making. Brain imaging shows activity across the entire organ

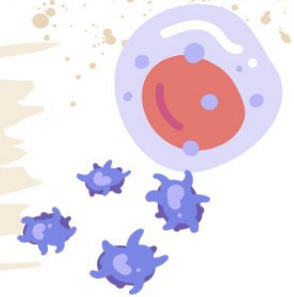


Myth: CRISPR can instantly cure any genetic disease.

Truth: CRISPR holds promise for treating genetic disorders but is not a cure-all. The technology still faces challenges with precision and unintended effects.

Myth: Stem cell research requires the creation of embryos.

Truth: Much modern research uses adult stem cells or induced pluripotent stem cells (iPSCs), which don't involve embryos. These alternatives reduce ethical concerns.



Myth: Biotechnology will allow humans to achieve immortality.

Truth: While biotech may extend life and improve health, immortality remains in the realm of science fiction. Aging and disease are complex challenges that we're still working to understand.





Myth : Cloning animals is the same as cloning humans.

Truth: Cloning animals (such as the famous Dolly the sheep) involves creating an organism genetically identical to another. However, cloning humans is much more complex, with serious ethical, moral, and biological concerns. The technology is not used for humans and likely won't be for some time due to ethical and technical issues.

Myth : Biotechnology is only relevant for the medical field.

Truth: Biotechnology plays a major role in many industries, including agriculture (creating drought-resistant crops), energy (producing biofuels), and environmental science (bioremediation to clean up oil spills). It impacts many aspects of our daily lives.



Myth: GM crops are unsafe and can cause harm.

Truth: Extensive testing has shown GM crops to be as safe as conventional crops. They also offer benefits like higher yields and reduced pesticide use.



Myth: All bacteria are harmful.

Truth: While some bacteria are pathogenic (disease-causing), the vast majority are harmless or even beneficial, such as those involved in digestion and other processes.

Myth: Genetic mutations always result in disease.

Truth: Not all genetic mutations lead to disease. Many mutations are neutral or even beneficial. Natural genetic variation is a key driver of evolution.



Myth: Biotechnology always results in unethical or harmful outcomes.

Truth: Like any technology, biotechnology can be used responsibly or irresponsibly. It has immense potential to improve lives, from curing genetic diseases to creating sustainable food sources. Its application depends on how it is regulated and used by society.



Myth: Gene editing can instantly cure all genetic diseases.

Truth: While gene editing (like CRISPR) shows great promise, many genetic diseases are complex, involving multiple genes and environmental factors. Clinical use is still being carefully tested.

Myth: Once something is genetically modified, the change is irreversible in the ecosystem.

Truth: Many biotech organisms are designed with safeguards, like sterility or containment features. Environmental impact studies are part of the approval process to prevent unintended spread.



Myth : Public opinion doesn't matter in biotech decisions.

Truth :Public opinion greatly influences biotech regulation, research funding, and policy. That's why science communication, education, and public engagement are so important.

Brain Wave





FUNGI THAT EAT PLASTIC: A NATURAL SOLUTION TO POLLUTION

Scientists from Yale University have discovered a remarkable fungus, *Pestalotiopsis microspora*, deep in the Amazon rainforest that could revolutionize how we tackle plastic pollution. This unique fungus can break down polyurethane—a common plastic found in insulation, shoes, and other products—by using it as its sole carbon source. What sets it apart is its ability to survive and degrade plastic even in oxygen-free environments, such as landfills where most plastic waste accumulates. The fungus produces special enzymes that break the strong chemical bonds in synthetic plastics, converting them into harmless organic compounds. This natural breakdown process has opened new doors in the field of bioremediation, which uses organisms to clean up pollutants. While large-scale application is still in development, *Pestalotiopsis microspora* offers a sustainable and promising solution to global plastic waste—showing how nature may hold the key to solving one of humanity’s most urgent environmental challenges.





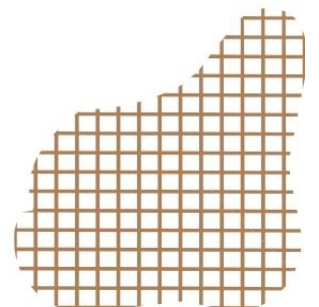
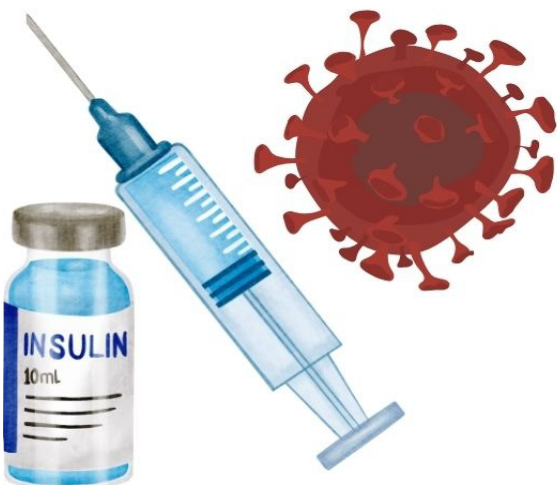
No More Needles? Scientists Develop Vaccine Cream

Scientists at Stanford University have developed a groundbreaking vaccine cream that could one day replace painful injections. Published in *Nature*, the study reveals that a harmless skin bacterium, *Staphylococcus epidermidis*, was genetically engineered to trigger immunity in lab mice. When applied topically, the cream prompted the production of protective antibodies even against deadly tetanus toxin.

The key lies in a bacterial protein called Aap, which activates immune cells in the skin. Because *S. epidermidis* naturally lives on human skin, this method could offer a painless alternative to shots.

“We all hate needles,” said lead researcher Dr. Michael Fischbach. Beyond comfort, the cream may also reduce inflammation often caused by injections.

The next phase involves testing on primates, with clinical trials in humans on the horizon. If successful, this innovation could transform vaccine delivery—making it easier, faster, and fear-free for people of all ages.



FORTE SOLACE





POOJA SREE S
III - BT



SUBIKSHA D
III - BT



GUNAVATHI A
III - BT





POOSHA P S
III - BT



NIVETHA S
III - BT



VINITHA S
III - BT





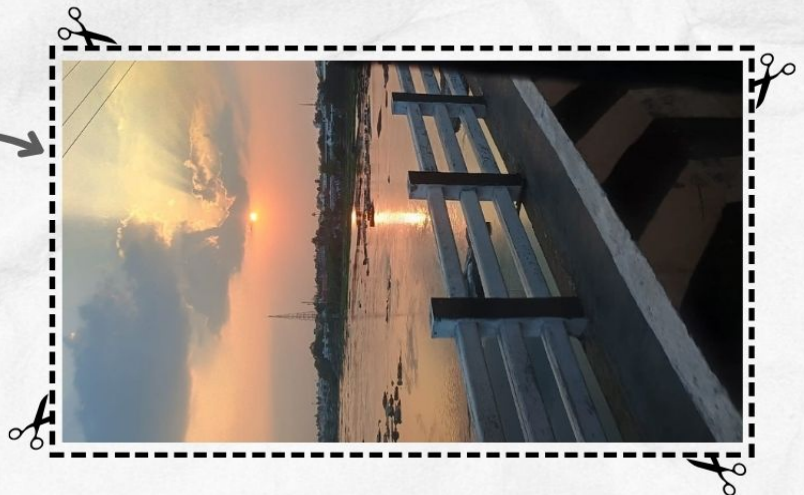
**RUBA C
IV - BT**



**JAYASREE G R
III - BT**



**ANGEL P
II - BT**





VINODHINI P
III - BT



KAMALI T
III - BT



PRIYAA P
III - BT





JOSHIKA S
III - BT



DEVI M
III - BT



LEKHA K
III - BT





RAKSHEETHA S
III - BT



MAHALAKSHMI B
III - BT



HEEMA PRIYA T
III - BT



**SENBAKA PRIYA
III - BT**



**DIKSHYA G T
III - BT**



**MEGAASRI S
III - BT**



தனிமையின் வாழ்க்கை பாடம்

எனக்குள் இருக்கும் உன்னை ரசிக்க
கற்றுக்கொடுத்ததும் நீயே
தூக்கம் வந்தாலும் தூங்காமல்
அழுதுக்கொண்டிருந்தபோது
ஆறுதல் சொன்னதும் நீயே
உரிமையோடு சிலரை உறவென்று
நினைத்துக்கொண்டிருந்தப் போது
தவறென உணர்த்தியதும் நீயே
வாழ்க்கை பாடத்தை
கற்றுக்கொடுத்ததும் நீயே
யார் என்னை வெறுத்தாலும் என்
நிழல்போல் இருக்கும் என் இனிய
தனிமையே

சி.இந்துஜா (III -BT)





தனிமையின் உலகம்

எனக்கு துணையாய் ஒரு உறவு
இல்லை என்று கவலைப்படுவதைவிட...
எனக்கு துணையாய் என் மனம்
இருக்கிறது என்று நினை...
ஏனெனில் இங்கு நம்மை ஏமாற்றவும்
காயப்படுத்தவும் யாரும் இல்லை...
எனவே தனிமையை நேசித்து
வாழ கற்றுக்கொண்டால்
தனிமையும் ஒரு இனிமையே!!!

ஜெயபூர் ராஜசேகர் (III -BT)





தனிமையின் தன்னம்பிக்கை

தனிமையில் நான், என்னை
அறிந்தேன்...!

உறவை அறிந்தேன்...!

நட்பை அறிந்தேன் ...!

என் பலம் அறிந்தேன்...!

என் பலவீனம் அறிந்தேன் ...!

நான் என்ன செய்தேன்,

என்ன செய்து கொண்டிருக்கிறேன்.

இனி நான் என்ன செய்ய வேண்டும்,

என்பதை அறிந்தேன் ...!

தனிமையில் நான் உலகை
அறிந்தேன்...!

ச. ஜெயபூர் (III -BT)





தனிமையின் தேடல்

கடலின் சீற்றமும் கரைகண்டு ஓய்ந்த
பின்பும் அலைபாயும் எந்தன் மனமோ
சொல்கிறது!

சில நேரங்களில் தனிமையை
தனிமையில் கடப்பது கடினம் சில
நேரங்களில் தனிமை தான் இனிமை!

வாழ்க்கையில் நான் நினைத்தது
எதுவும் கிடைக்காமல் போகும்
போதெல்லாம் ஆறுதல் சொல்கிறது
இந்த தனிமை!

ப.கோபிகா(III -BT)





தனிமையின் சிறகுகள்

அழகையாலும் வார்த்தைகளாலும்
பிறர் சொல்வதை கேட்டு
புண்படுவதை விட
யார் சொல்லையும் கேட்காமல்
தனக்கு பிடித்தபடி இந்த பூமியில்
தனிமை என்னும் அற்புதமான
உலகில் வாழ்வதே
மன நிம்மதியையும்
மகிழ்ச்சியையும் தரும்

அ.குணவதி (III -BT)



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