

3.3.2 Number Of Research Papers Published In The Journals Notified On UGC Website During the Year

INDEX SHEET

Sl.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Indexing	Page/ Journal No
1	Identification of anti-cancer targets of eco-friendly waste Punica granatum peel by dual reverse virtual screening and binding analysis	Prashanth Kumar HP	BT	Asian Pacific journal of cancer prevention	2014-Dec	15137368	Scopus	1
2	Facile green fabrication of iron-doped cubic ZrO ₂ nanoparticles by Phyllanthus acidus: Structural, photocatalytic and photoluminescent properties	K. Gurushantha	Chemistry	Journal of Molecular Catalysis A: Chemical	2014-Nov	1381-1169	Scopus	2
3	Optical Properties of Praseodymium Doped Silver-Borate Glasses	Jagadeesha Gowda.G.V	Physics	Canadian Journal of Physics.	2014-Oct	0008-4204	Scopus	3
4	Enhanced Degradation of Captan by Immobilization of Laccase on circulars	Veena S More	BT	J of Micro. Biotech. food science	2014-Oct	1338-5178	Scopus	4
5	Phase transformation of ZrO ₂ :Tb ³⁺ +nanophosphor: Color tunable photoluminescence and photocatalytic activities	K. Gurushantha	Chemistry	Journal of Alloys and Compounds	2014-Oct	0925-8388	Scopus	5
6	Spectrophotometric estimation of risperidone in tablets	Roopa KP	Chemistry	Indian journal of pharmaceutical science	2014-Sep	0250474X	WOS	6
7	Ionic conductivity of praseodymium doped silver-borate glasses	Jagadeesha Gowda G V	Physics	Journal of Alloys and Compounds	2014-Sep	09258388	Scopus	7
8	Biotransformation of Δ ³ -carene by	Veena S More	BT	J of scientific and	2015-Apr	0022-4456	Scopus	8

3.3.2 Number Of Research Papers Published In The Journals Notified On UGC Website During the Year

INDEX SHEET

	Penicilliumnigricans			Industrial research				
9	Influence of Aspect Ratio of Vibratory Flap on Dynamic Response of Clamped Rectangular Plate	P.Mahadevaswamy, BS Suresh	ME	International Journal of Structural Stability and Dynamics	2015-Apr	0219-4554	Scopus	9
10	Cloning, expression and characterization of l-asparaginase from Pseudomonas fluorescens for large scale production in E. coli BL21	Vijya Kishore	BT	3 Biotech	2015-Apr	2190572X	Scopus	10
11	Artificial skin scaffold to treat burn scars and it's other applications	Saranya D	BT	International Journal of Pharmacy and Biological Sciences	2015-Apr	22307605	UGC Earlier	11
12	Design, modeling and performance analysis of carbon nanotube with DNA strands as biosensor for prostate cancer	B N Shobha	EC	Microsystem Technologies	2015-Apr	0946-7076	Scopus	12
13	Enhanced degradation of pendimethalin by immobilized cells of <i>Escherichia coli</i> XJU	Veena S More	BT	3 Biotech	2015-Dec	2190-572X	Scopus	13
14	A review on various types of toxins	Soumya C	BT	Pharmacophore	2015-Jul	22295402	WOS	14
15	A review on various types of toxins	Soumya C	BT	Pharmacophore	2015-Jul	22295402	WOS	15
16	A review on various types of toxins	Vinutha Moses	BT	Pharmacophore	2015-Jul	22295402	WOS	16

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Identification of anti-cancer targets of eco-friendly waste Punica granatum peel by dual reverse virtual screening and binding analysis	Prashanth Kumar HP	BT	Asian Pacific journal of cancer prevention	Dec-14	15137368	Scopus

DOI: <http://dx.doi.org/10.7314/APJCP.2014.15.23.10345>
 Anti-Cancer Targets of Eco-Friendly Waste Punica granatum Peel by Virtual Screening and Binding Analysis

RESEARCH ARTICLE

Identification of Anti-Cancer Targets of Eco-Friendly Waste Punica granatum Peel by Dual Reverse Virtual Screening and Binding Analysis

Talambedu Usha¹, Arvind Kumar Goyal², Syed Lubna¹, HP Prashanth³, T Madhan Mohan⁴, Veena Pande⁵, Sushil Kumar Middha^{1*}

Abstract

Background: *Punica granatum* (family: Lythraceae) is mainly found in Iran, which is considered to be its primary centre of origin. Studies on pomegranate peel have revealed antioxidant, anti-inflammatory, anti-angiogenesis activities, with prevention of premature aging and reducing inflammation. In addition to this it is also useful in treating various diseases like diabetes, maintaining blood pressure and treatment of neoplasms such as prostate and breast cancer. **Objectives:** In this study we identified anti-cancer targets of active compounds like corilagin (tannins), quercetin (flavonoids) and pseudopelletierine (alkaloids) present in pomegranate peel by employing dual reverse screening and binding analysis. **Materials and Methods:** The potent targets of the pomegranate peel were annotated by the PharmMapper and ReverseScreen 3D, then compared with targets identified from different Bioassay databases (NPACT and HITs). Docking was then further employed using AutoDock pyrx and validated through discovery studio for studying molecular interactions. **Results:** A number of potent anti-cancerous targets were obtained from the PharmMapper server according to their fit score and from ReverseScreen 3D server according to decreasing 3D scores. **Conclusion:** The identified targets now need to be further validated through *in vitro* and *in vivo* studies.

Keywords: *Punica granatum* - ingredients - pharmMapper - reversescreen 3D - bioassay database - autodesk pyrx

Asian Pac J Cancer Prev, 15 (23), 10345-10350

Introduction

Punica granatum L., (family Lythraceae) (Pomegranate) is a shrub which attains a height of about 5-8 meters (Middha et al., 2013a). It is believed to have originated in Iran and is cultivated majorly in Mediterranean region, Indian subcontinent, Middle East, Central Asia, Northern Africa and tropical Africa (Akbarpour et al., 2009). The word pomegranate is derived from Latin word "pomum" means "apple" and "granatum" means "seeded". It is variously named throughout the globe like *grenadine* or *granatapfel* in German, *granatapfel* in Swedish, *grenade* in French, *granda* in Spanish and *dadim/dadima* in India. Pomegranate is used widely in domestic as well as industrial purposes such as cooking, preparation of juice, baking, making of wine and other alcoholic beverages.

The fruit is round consisting a crown in the base rendered from the calyx. The texture of the peel is stringy and sturdy, with the colour ranging between yellow to red

and is thick about 5 inches. The white spongy membrane inside form the compartments consisting sac like structure which is packed with pulp that is red or white in colour and juicy (Middha et al., 2013b).

Middha et al (2014) showed recently that the pomegranate peel or the rind (PP) which was earlier considered as an agricultural waste now should be removed has high potential for its medicinal and therapeutic values. It is evident that PP has better antioxidative properties than *Musa paradisica* and *Citrus sinensis* peel (Parmer et al., 2008). Several studies have also shown the presence of major active compounds such as tannins, flavonoids, and alkaloids in the pomegranate peel (Middha et al., 2013a). Due to the presence of these compounds the pomegranate peel has been focused by many researchers for the study of its incredible effects on human health. The pomegranate peel has been widely used for the treatment and prevention of several diseases like cancer (Hong et al., 2008; Dikmen et al., 2011; Middha et al., 2013a), diabetes (Middha et al., 2012; 2014), cardiovascular disease (Jurek et al., 2008).

¹DIT-BIT facility, Department of Biotechnology, Maharani Lakshmi Ammanni College For Women, Bangalore, ²Bambas Technology, Reddoland University, Assam, ³Department of Biotechnology, Sathagiri College of Engineering, Bangalore, ⁴Biotechnology Information Centre, Department of Biotechnology, New Delhi, ⁵Department of Biotechnology, Kannur University, Nainital, India

*For correspondence: sushil.middha@gmail.com

Asian Pacific Journal of Cancer Prevention, Vol 15 | 2014 10345

The screenshot shows a web browser window with the Scopus search results page. The search criteria are set to 'All' and 'Export to Excel'. The results table shows one result from the 'Asian Pacific Journal of Cancer Prevention' with a CiteScore of 1.47, a highest percentile of 56%, 4,330 citations, 2,949 documents, and 60% cited. The page also includes filters for 'only Open Access', 'previous 3 years', 'minimum selected', 'um citations', 'um documents', 'highest quartile', and 'only titles in top 10'.

Principal
 Sathagiri College of Engineering
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560 057

Journal Paper No -2

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Facile green fabrication of iron-doped cubic ZrO_2 nanoparticles by <i>Phyllanthus acidus</i> : Structural, photocatalytic and photoluminescent properties	K. Gurushantha	Chemistry	Journal of Molecular Catalysis A: Chemical	Feb-15	1381-1169	Scopus

Web of Science X Facile green fa X Gmail X Facile green fa X Facile gree

article/abs/pii/S1381116914004804?via%3Dihub

Get Access Share Export

Facile green fabrication of iron-doped cubic ZrO_2 nanoparticles by *Phyllanthus acidus*: Structural, photocatalytic and photoluminescent properties

K. Gurushantha^a, K.S. Anantharaju^a, H. Nagabhushana^b, S.C. Sharma^c, Y.S. Vidya^d, C. Shivakumara^e, H.P. Nagaswarupa^a, S.C. Prashantha^a, M.R. Anilkumar^a

Show more

<https://doi.org/10.1016/j.molcata.2014.10.025> Get rights and conten

Highlights

- ZrO_2 : Fe^{3+} NPs were synthesized by green route using *Phyllanthus acidus* leaves as fuel.
- The NPs were characterized by PXRD, SEM, UV-Visible, FTIR, TEM and PL.

S20904479...pdf Network error

Source details

Journal of Molecular Catalysis A: Chemical

Formerly part of: Journal of Molecular Catalysis

Continued as: Molecular Catalysis

Scopus coverage years: from 1994 to 2017 (coverage discontinued in Scopus)

Publisher: Elsevier

ISSN: 1381-1169

Subject area: Chemical Engineering: Process Chemistry and Technology Chemistry: Physical and Theoretical Chemistry Chemical Engineering: Catalysis

View all documents Set document alert Save to source list Journal Homepage

CiteScore CiteScore rank & trend CiteScore presets Scopus content coverage

CiteScore 2016 3.96

SNIP

Feedback Compare sources

Create account Sign in

Author search Sources

Scopus Preview

Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560 057

Journal Paper No -3

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Optical Properties of Praseodymium Doped Silver-Borate Glasses	Jagadeesha Gowda.G.V	Physics	Canadian Journal of Physics.	Apr-14	0008-4204	Scopus

researchgate.net/publication/270609237_Optical_properties_of_praseodymium_doped_silver-borate_glasses

ResearchGate Search for publications, researchers, or questions Discover by subject area

See all 15 References Download citation

Optical properties of praseodymium doped silver-borate glasses

Article in Canadian Journal of Physics 92(10):1154-1157 · October 2014 with 44 Reads DOI: 10.1139/cjp-2012-0497 Cite this publication

Dr.Jagadeesha Gowda G V #18.05 · Sapthagiri College of Engineering

Eraiah Bheemaiah #129.55 · Bangalore University

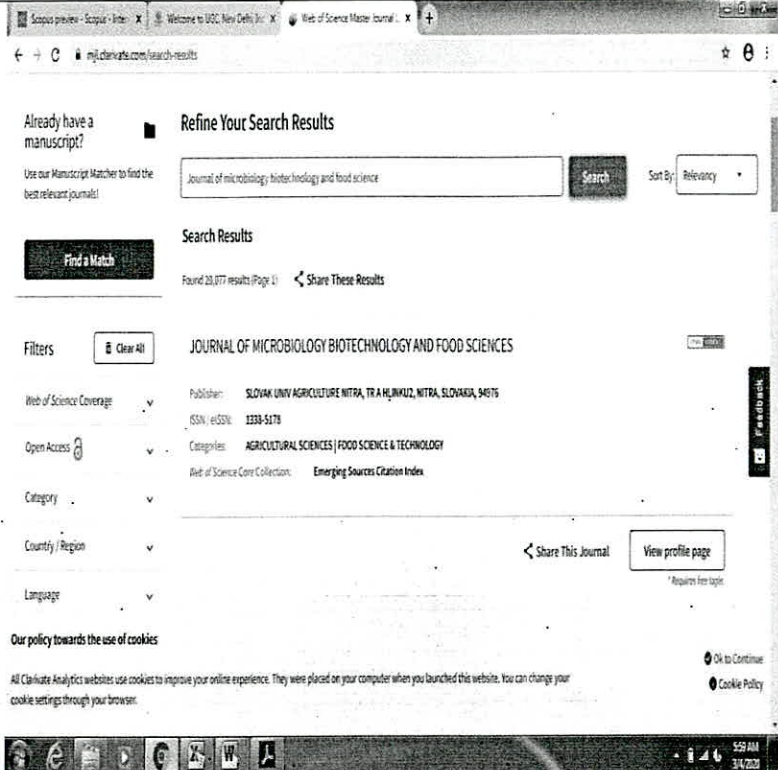
Abstract

Praseodymium doped silver-borate glasses having composition $x\text{Pr(6)O(11)}-(25-x)\text{Ag}_2\text{O}-75\text{B}_2\text{O}_3$ ($x = 0, 1, 2, 3, 4, 5$) were prepared by conventional melt quenching method. The density, molar volume, and optical energy band gap of these glasses were measured. Optical absorption spectra of these glasses were recorded in the range 300-1000 nm at room temperature. The refractive index, molar refraction, and polarizability of oxide ion were calculated by using Lorentz-Lorentz relations. The oxide ion polarizabilities deduced from two different quantities, viz. refractive index and optical energy band gap, agree well compared with other glasses. The variation of the preceding optical parameters with respect to praseodymium concentration is explained.

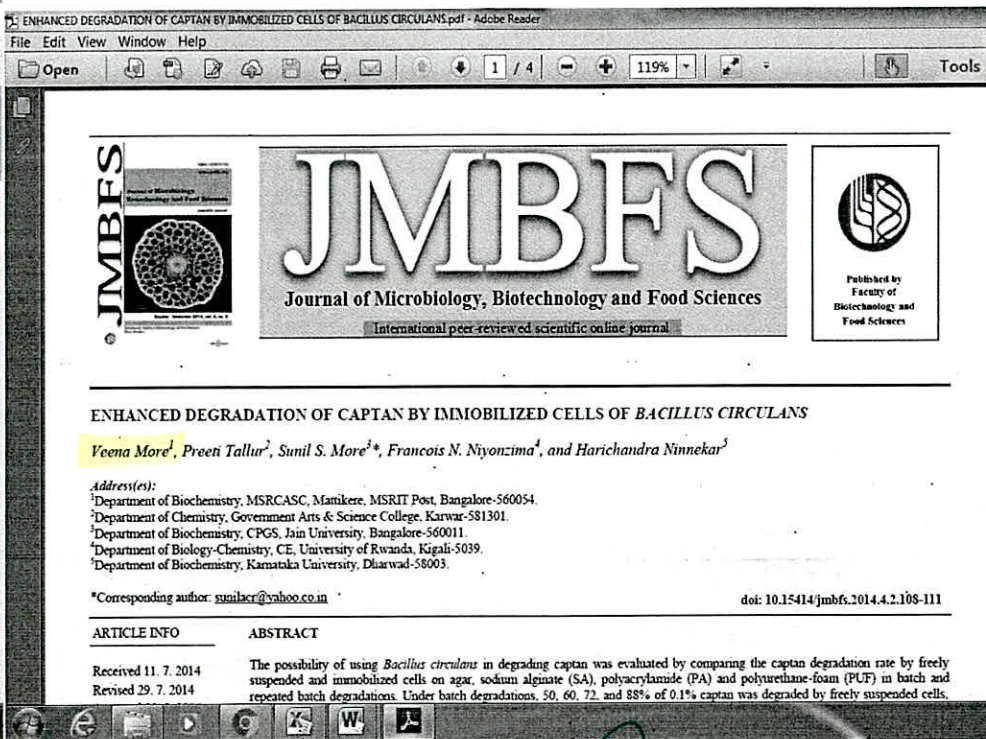
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Journal Paper No -4

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Enhanced degradation of captan by immobilized cells of bacillus circulans	Veena S More	BT	J Microbiol Biotech Food Sci	2014-Oct	1338-5178	WOS



The screenshot shows the JMBFS website with search results for 'Journal of microbiology biotechnology and food science'. The search results page displays the journal's name, ISSN (1338-5178), and categories (AGRICULTURAL SCIENCES | FOOD SCIENCE & TECHNOLOGY). It also shows the publisher information: SLOVAK UNIV AGRICULTURE NITRA, TR A HENKUZ, NITRA, SLOVAKIA, 94076.



The screenshot shows the JMBFS journal cover page. The title of the article is 'ENHANCED DEGRADATION OF CAPTAN BY IMMOBILIZED CELLS OF *BACILLUS CIRCULANS*'. The authors listed are Veena More¹, Preeti Tallur², Sunil S. More^{3*}, Francois N. Niyonzima⁴, and Harichandra Ninnekar⁵. The journal is the 'Journal of Microbiology, Biotechnology and Food Sciences', an international peer-reviewed scientific online journal. The cover also includes the JMBFS logo and the Faculty of Biotechnology and Food Sciences logo.

Principal
 Sapthagiri College of Engineering,
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560 057

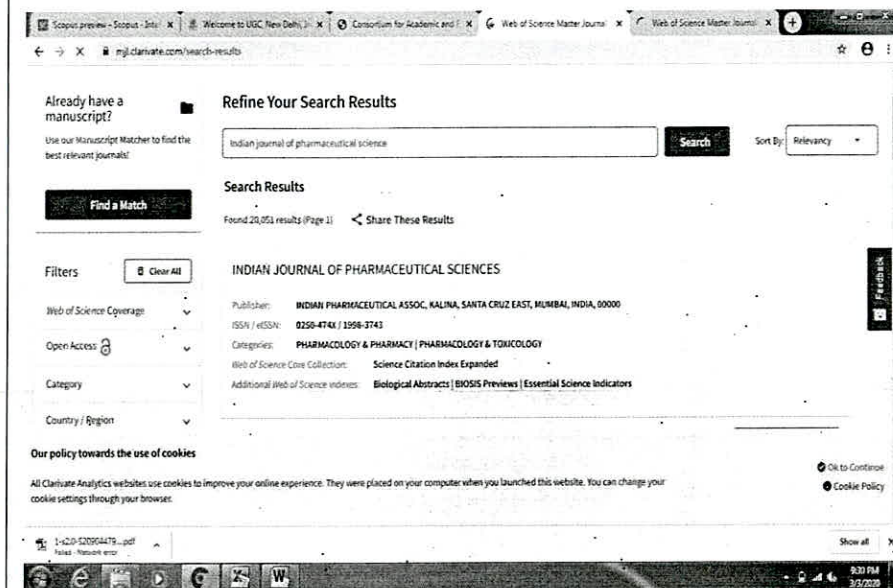
Journal Paper No -5

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Phase transformation of ZrO ₂ :Tb ³⁺ +nanophosphor: Color tunable photoluminescence and photocatalytic activities	K. Gurushantha	Chemistry	Journal of Alloys and Compounds		0925-8388	Scopus


 Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560 057

Journal Paper No -6

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Spectrophotometric estimation of risperidone in tablets	Roopa KP	Chemistry	Indian journal of pharmaceutical science	Sep-14	0250474X	WOS



Spectrophotometric Estimation of Risperidone in Tablets

B. K. JAYANNA*, T. D. DEVARAJ, K. P. ROOPA, G. NAGENDRAPPA, H. R. ARUN KUMAR AND N. GOWDA
Department of Chemistry, B. N. M. Institute of Technology, Bengaluru-560 070, India

Jayanna *et al.*: Spectrophotometric Estimation of Risperidone

A simple, rapid and highly sensitive spectrophotometric method is developed for the determination of risperidone in tablet formulation. The method is based on the oxidation of drug using potassium permanganate in alkaline medium and excess potassium permanganate oxidizes 1,10-phenanthroline Fe(II). The measurement of decrease in absorbance of 1,10-phenanthroline Fe(II) was done at 415 nm. The beer's law is obeyed in the concentration range of 5.0 to 40.0 µg/ml and molar absorptivity is found to be 7.3932×10^4 l/mol/cm. The proposed method is well suited for the pharmaceutical formulations.

Key words: Risperidone, potassium permanganate, 1,10-phenanthroline Fe(II), oxidation, tablets, spectrophotometry

*Address for correspondence

E-mail: jay_bidarur@yahoo.co.in

452

Indian Journal of Pharmaceutical Sciences

September - October 2014

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Journal Paper No -7

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Ionic conductivity of praseodymium doped silver-borate glasses	Jagadeesha Gowda G V	Physics	Journal of Alloys and Compounds	Jan-15	09258388	Scopus

10/31/2019 Ionic conductivity of praseodymium doped silver-borate glasses - ScienceDirect

Journal of Alloys and Compounds
Volume 620, 25 January 2015, Pages 192-196

Ionic conductivity of praseodymium doped silver-borate glasses
G.V. Jagadeesha Gowda^a, B. Eraliah^b, A. S.S., R.V. Anavekar^b

^a Department of Physics, Sapthagiri College of Engineering, Bangalore 560057, India
^b Department of Physics, Bangalore University, Bangalore 560054, India

Received 2 August 2014, Revised 30 August 2014, Accepted

Check for updates

Show less
<https://doi.org/10.1016/j.jallcom.2014.09.019>

Start tracking your Reading History^x
Sign in and never lose track of an article again.
Register for free >
Get rights and content

Highlights

- Glasses of the composition $x\text{Pr}_6\text{O}_{11}-(35-x)\text{Ag}_2\text{O}-65\text{B}_2\text{O}_3$ ($x = 0, 0.1-0.5$ mol%) have been prepared using the melt quenching method. The ac and dc conductivity and dielectric properties of glass have been measured over a wide range of frequencies and temperatures.
- Experimental results indicate that the ac conductivity and the dielectric constants depend on temperature, frequency and praseodymium content.
- The dielectric data has been analyzed using modulus formalism. The stretched exponent β is found to be independent of temperature.

Abstract

<https://www.sciencedirect.com/science/article/abs/pii/S0925838814021537>

1/2

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarahatta Road,
Bangalore-560 057

Journal Paper No -8

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Biotransformation of Δ^3 -carene by <i>Penicilliumnigricans</i>	Veena S More	BT	J of scientific and Industrial research	Apr-15	0022-4456	Scopus

Source details

Journal of Scientific and Industrial Research

Open Access

Scopus coverage years: from 1969 to 1970, from 1972 to 1978, 1980, from 1982 to 1991, from 1994 to 2019

Publisher: Scientific Publishers

ISSN: 0022-4456

Subject area: [Multidisciplinary](#)

CiteScore 2018 0.62

SJR 2018 0.306

SNIP 2018 0.463

[View all documents](#) [Set document alert](#) [Save to source list](#) [Journal Homepage](#)

[CiteScore](#) [CiteScore rank & trend](#) [CiteScore presets](#) [Scopus content coverage](#)

Veena More.pdf (SECURED) - Adobe Reader

File Edit View Window Help

Open 1 / 6 116%

Journal of Scientific & Industrial Research
Vol 74, April 2015, pp. 217-222

Biotransformation of Δ^3 -carene by *Penicillium nigricans*

U M Muddapur¹, R S Bennur², S M Veena³, F N Niyonzima⁴ and S S More^{4*}

¹Department of Biotechnology, K.L.E.'s College of Engineering and Technology, Udyambag, Belgaum-590008, India
²Department of Biochemistry, Karnatak University, Dharwad-580003, India
³Department of Biochemistry, Ramaiah College of Science, Commerce and Arts, Manikere, Bangalore -560045, India
⁴Department of Biochemistry, Center for Post Graduate Studies, Jain University, 18/3, 9th Main Jayanagar 3rd Block, Bangalore -560011, India

Received 8 March 2013; revised 12 September 2014; accepted 15 January 2015

A fungus was isolated from forest soil by selective enrichment method with Δ^3 -carene as a sole source of carbon and identified as *Penicillium nigricans*. The isolate was capable of transforming Δ^3 -carene into neutral [dihydrocarvone, carvone, carveol, (+)-trans-p-mentha-5,8-dien-2-ol and (+)-trans-p-mentha-5,8-dien-2-one] and acidic (perillic acid and 2-hydroxy-p-menth-8-ene-7-oidic acid) metabolic compounds. These compounds were identified based on infrared (IR), proton nuclear magnetic resonance (¹H NMR) and mass spectrum (MS) studies. Three pathways have been proposed for the transformation of Δ^3 -carene into the neutral and acid metabolic compounds based on the study of oxygen consumption by Δ^3 -carene grown fungal cells. As the different metabolic intermediates of Δ^3 -carene are much used in the perfume industry, the Δ^3 -carene, which is abundantly available, can be used as a starting material in the perfume industry by microbial techniques, using this fungal strain.

Principal
 Sapthagiri College of Engineering
 Chik*asandra, Hesaraghatta Road,
 Bangalore-560 057

Journal Paper No -9

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
<u>Influence of Aspect Ratio of Vibratory Flap on Dynamic Response of Clamped Rectangular Plate</u>	P.Mahadevaswamy, BS Suresh	ME	<u>International Journal of Structural Stability and Dynamics</u>	Apr-15	0219-4554	Scopus

The screenshot shows the Scopus Preview interface. On the left, under 'Source details', the journal 'International Journal of Structural Stability and Dynamics' is listed with its Scopus coverage years (2004-2019), publisher (World Scientific), ISSN (0219-4554), and subject areas. Metrics for 2018 are provided: CiteScore (2.28), SJR (0.831), and SNIP (1.221). On the right, the article title 'Influence of Aspect Ratio of Vibratory Flap on Dynamic Response of Clamped Rectangular Plate' by P. Mahadevaswamy and B. S. Suresh is shown, along with its DOI and citation count (2). A 'View Article' button is visible at the bottom of the article preview.

Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560 057

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Cloning, expression and characterization of L-asparaginase from <i>Pseudomonas fluorescens</i> for large scale production in <i>E. coli</i> BL21	Vijya Kishore	BT	3 Biotech	Apr-15	2190572X	Scopus

The screenshot shows the journal's website interface. At the top, there are navigation links for 'www.ugc.ac.in', 'Welcome to UGC, N...', 'Consortium for Asia...', 'Web of Science Ma...', and 'Scopus preview - Si...'. Below this is a search bar with the text 'Search Results' and a search button. The search results show 'Found 1 results (Page 1)' and a list of results for '3 BIOTECH'. The first result is 'Cloning, expression and characterization of L-asparaginase from *Pseudomonas fluorescens* for large scale production in *E. coli* BL21' by 'Vijya Kishore', 'K. P. Nishitha', and 'H. K. Manonmani'. The website also features a 'Find a Match' button, a 'Filters' section with 'Clear All' and 'Web of Science Coverage', and a 'Cookie Policy' section at the bottom.

3 Biotech
DOI: 10.1007/s13205-015-0500-5

ORIGINAL ARTICLE

Cloning, expression and characterization of L-asparaginase from *Pseudomonas fluorescens* for large scale production in *E. coli* BL21

Vijay Kishore¹ · K. P. Nishitha² · H. K. Manonmani²

Received: 27 January 2015 / Accepted: 26 March 2015
© The Author(s) 2015. This article is published with open access at Springerlink.com

Abstract L-Asparaginase (E.C. 3.5.1.1) is used as an anti-neoplastic drug in the treatment of acute lymphoblastic leukemia. L-Asparaginase from *Pseudomonas fluorescens* was cloned and overexpressed in *E. coli* BL21. The Enzyme was found to be a fusion protein-asparaginase complex, which was given a lysazyme treatment and sonication, and then was purified in a Sepharose 6B column. The enzymatic properties of the recombinant enzyme were studied and the kinetic parameters were determined with K_m of 109.99 nM and V_{max} of 2.88 μ mol/min. Recombinant enzyme showed pH optima at 6.3 and temperature optima at 34 °C. Asp gene was successfully cloned into *E. coli* BL21 which produced high level of asparaginase intracellularly with 85.25 % recovery of enzyme with a specific activity of 0.94 IU/mg protein. The enzyme was a tetramer with molecular weight of approximately 141 kDa.

Keywords L-Asparaginase · Cloning · *E. coli* · Enzyme activity

Introduction

L-Asparaginase enzymes (L-asparagine amidohydrolase) catalyze the hydrolysis of L-asparagine to L-aspartate and ammonia, and to a lesser extent, the hydrolysis of L-glutamine to L-glutamate (Ebrahiminezhad et al. 2011). Bacterial L-asparaginase are of two types: type 1 and type 2; type 2 showed antitumor activity because of which interest in L-asparaginase arose (Lee et al. 1989). Normal cells can synthesize L-asparaginase and because of their ability to produce this amino acid, normal cells are protected from L-asparaginase starvation unlike tumor cells which are dependent on an exogenous supply (Oza et al. 2011). Depletion of the circulating L-asparaginase by L-asparaginase enzyme results in anti-neoplastic activity. However, *Escherichia coli* and *Erwinia* sp. enzymes have been frequently used in cancer therapy (Avramis and Panosyan 2005).

L-Asparaginase from bacterial origin can cause hypersensitivity in the long term used, leading to allergic reactions and anaphylaxis. The toxicity is partially attributable to the glutaminase activity of these enzymes (Oza et al. 2011). L-Asparaginases with high asparaginase activity and negligible glutaminase activity are reported to be less troublesome during the course of antitumor therapy (Hawkins et al. 2004). The search for other asparaginase sources, with new immunological characteristics can lead to enzyme with less adverse effects. Furthermore, new studies have revealed potential application of this enzyme in prevention of acrylamide formation in fried potatoes and similar food products. Therefore, introduction of new fermentation and purification protocols for production of L-asparaginase II will be mandatory to satisfy these demands (Aghaiepoor et al. 2011). So, in this study we will be describing the cloning, expression, purification and characterization of recombinant L-asparaginase from *P. fluorescens* into *E. coli* BL21.

H. K. Manonmani
vijayksh@gmail.com

¹ Department of Biotechnology, Sathagiri College of Engineering, Bangalore 560 057, India

² Fermentation Technology and Bioengineering Department, Central Food Technological Research Institute (CSIR), Mysore 570 020, India

Published online: 05 April 2015

Springer

Principal
Sathagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Journal Paper No -11

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Artificial skin scaffold to treat burn scars and it's other applications	Saranya D	BT	International Journal of Pharmacy and Biological Sciences	Apr-15	22307605	UGC Cancelled

UGC-Cancelled-List.pdf - Adobe Reader

File Edit View Window Help

Open 140 / 228 69.9%

Find 46322 Previous Next

UGC Approved (old) List of Journals

46205	AIMS International Journal of Management	UNIV	Social Science	AIMS International	19397011	United States
46229	International Journal of Education	UNIV	Multidisciplinary	International Journal of Education	23474343	India
46242	Diagona Studies	UNIV	Social Science: Arts & Humanities	Taylor & Francis	09739572, 09763457	India
46257	EURO Journal on Computational Organization	UNIV	Science	Springer	21923406, 21924414	United Kingdom
46269	Advances in Agriculture	UNIV	Science	Hindawi	23147539, 23147539	United States
46274	Global Education International	UNIV	Multidisciplinary: Social Science	Sage Publications Ltd	20479977, 02614294	United Kingdom
46280	International Journal on Applied and Computational Mathematics	UNIV	Science	Springer	23495103, 21995796	China
46281	The IUP Journal of Corporate Governance	UNIV	Social Science	Sage Publications India Pvt. Ltd	09740862	India
46293	danakada - i - Perizhiki	UNIV	Arts & Humanities	Telam University of Medical Sciences	16831764	Iran
46296	Corporate Governance: The international journal of business in society	UNIV	Social Science	Emerald Publishing Limited	14720701	India
46301	History of Economics Review	UNIV	Social Science	Routledge	10370196, 18306318	Australia
46303	Sekia Journal	UNIV	Science	Springer	22545902, 22817873	Italy
46322	International Journal of Pharmacy and Biological Sciences	UNIV	Science	Jaypal Reddy Gangadi, Ed. & Pub.	22307605	India
46333	International Journal of Image and Graphics	UNIV	Science	World Scientific Publishing Co. Pte. Ltd	82194678	Singapore

2014-Data jour... w3 Final -UGC scan... New Tab - Goo... x3 2014- journal &... UGC-Cancelled...



Available Online through
www.ijpbs.com (or) www.ijpbsonline.com

JPBS [Volume 5] Issue 2 [APR-JUN/2015/11-24]

Research Article
Biological Sciences

ARTIFICIAL SKIN SCAFFOLD TO TREAT BURN SCARS AND IT'S OTHER APPLICATIONS

Divya Sree.D¹ & Saranya.D²

¹8th semester, Department of Biotechnology, Sapthagiri College of Engineering, Bengaluru-57

²Assistant professor, Department of Biotechnology, Sapthagiri College of Engineering, Bengaluru-57

*Corresponding Author Email: divyasree4294@gmail.com

ABSTRACT

According to present strategies of regenerative medicine, it is focussing on altered skin (such as burnt skin) which can be transplanted with combination of scaffold and biomolecules [1][2]. In current years, biologically active scaffolds are being used as extracellular matrix that can induce synthesis of tissues and organs [3]. Scaffold is required for the restoration of the function of tissue and its regeneration as it acts as short term matrix for cell proliferation and extracellular matrix deposition [4]. Scaffolds are used for tissue engineering such as bone, cartilage, ligament, skin, vascular tissues, neural tissues, and skeletal muscle and as vehicle for the controlled delivery of drugs, proteins, and DNA [5]. Artificial skin finds its application in a broad range of areas including robotics, human-computer interfaces and other areas that involve mechanical deformation [6]. In this paper, an overview of the artificial skin scaffolds, its material properties which are used for treating burnt scars and its application is discussed.

KEY WORDS

Artificial skin, collagen, ECM, epidermis freeze drying, grafting, necrotic tissue scaffold.

INTRODUCTION

Skin is the largest organ of human body that covers entire body and protects the internal organs against infection, injury and harmful sun rays [7].

When the skin is critically damaged because of disease or burns, the body cannot respond fast enough to make the necessary substitution of cells and some burn victims may die due to loss of plasma and infection. To avoid these consequences, and to correct these deformities, artificial skin or skin grafts are used.

Artificial skin is a synthetic substitute which is shaped in laboratory for human skin that can protect the lives of severely burned patients and it covers the entire body, keeping dangerous bacteria out and vital fluids in [8].

Scaffold designing and its fabrication are major area of biomaterial research, and they are also important for tissue engineering and regenerative medicine research. Scaffold plays important role in tissue regeneration and its repair. During the past two decades, many works have been done to extend potentially applicable scaffold materials for tissue engineering. Scaffolds are defined as three-dimension porous solid biomaterials designed to perform some following functions [9][10]:

- Uphold cell-biomaterial interactions, cell adhesion, and ECM deposition.
- Allows sufficient transport of gases, nutrients, and regulatory factors to allow cell survival, proliferation, and differentiation.

International Journal of Pharmacy and Biological Sciences (e-ISSN: 2230-7605)
Divya Sree.D¹ & Saranya.D²

www.ijpbs.com or www.ijpbsonline.com

Int J Pharm Bio Sci

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 057

Journal Paper No -12

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Design, modeling and performance analysis of carbon nanotube with DNA strands as biosensor for prostate cancer	B N Shobha	EC	Microsystem Technologies	Apr -15	0946-7076	Scopus

10/31/2019

Design, modeling and performance analysis of carbon nanotube with DNA strands as biosensor for

Springer Link

Design, modeling and performance analysis of carbon nanotube with DNA strands as biosensor for prostate cancer

Microsystem Technologies

April 2015, Volume 21, Issue 4, pp 791–800 | Cite as

- B. N. Shobha (1) Email author (b_n_shobha67@yahoo.com)
- N. J. R. Muniraj (2)

1. Karpagam University, , Coimbatore, India
2. TSITW, , Coimbatore, India

Technical Paper
First Online: 08 August 2014

- 555 Downloads
- 8 Citations

Abstract

Prostate cancer which causes panic among human beings due to deaths occurring when not detected in initial stages demands a means of detection and diagnosis. Biosensors play an important role in detection of cancer cells or molecules in blood samples or urine samples using DNA strands. In this paper, we analyze properties of Single Wall Carbon Nano Tube (SWCNT) and Multi Wall Carbon Nano Tube (MWCNT) of 30 nm length and semiconducting nature. SWCNT is suitable for biosensor applications due to its high current carrying capability. Prostate Specific Antigen present in blood sample is detected using DNA strands, in this work three different DNA strands are analyzed for its performance. Surface charge density is 23.4656 M for dsDNA strand. The simulation tool Monte Carlo from Nanohub.org is used for validation of results.

Keywords

Prostate Cancer Prostate Specific Antigen Surface Charge Density Peptide Nucleic Acid Detect Prostate Cancer

These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves. This is a preview of subscription content, log in to check access.

References

<https://link.springer.com/article/10.1007/s00542-014-2281-x>

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Search Results

0946-7076

Search

Sort By: Title (A-Z)

Found 1 results (Page 1)

(Exact Match)

MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS

Publisher: SPRINGER HEIDELBERG, TIERGARTENSTRASSE 17, HEIDELBERG, GERMANY, D-69121

ISSN / eISSN: 0946-7076 / 1432-1658

Categories: MATERIALS SCIENCE, MULTIDISCIPLINARY | MATERIALS SCIENCE & ENGINEERING | ENGINEERING, ELECTRICAL & ELECTRONIC | NANOSCIENCE

Filters

Clear All

Web of Science Coverage

Open Access

Our policy towards the use of cookies

All Clarivate Analytics websites use cookies to improve your online experience. They are placed on your computer when you launched this website. You can change your cookie settings through your browser.

Ok to Continue

Cookie Policy

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
Enhanced degradation of pendimethalin by immobilized cells of <i>Bacillus lehensis</i> XJU	Veena S More	BT	3 Biotech	2015-Dec	2190-572X	Scopus

3 Biotech (2015) 5:967-974
DOI 10.1007/s13205-015-0299-0

CrossMark

ORIGINAL ARTICLE

Enhanced degradation of pendimethalin by immobilized cells of *Bacillus lehensis* XJU

Veena S. More¹ · Preeti N. Tallur² · Francois N. Niyonzima³ · Sunil S. More⁴

Received: 14 October 2014 / Accepted: 25 March 2015 / Published online: 4 April 2015
© The Author(s) 2015. This article is published with open access at Springerlink.com

Abstract A bacterium capable of degrading pendimethalin was isolated from the contaminated soil samples and identified as *Bacillus lehensis* XJU based on 16S rRNA gene sequence analysis. 6-Aminopendimethalin and 3,4-dimethyl 2,6-dinitroaniline were identified as the metabolites of pendimethalin degradation by the bacterium. The biodegradation of pendimethalin by freely suspended and the immobilized cells of *B. lehensis* on various matrices namely agar, alginate, polyacrylamide, and polyurethane foam was also investigated. The batch degradation rate was increased to 0.2 %, the immobilized cells could be reused but the pendimethalin degradation rate was decreased. Polyurethane foam-immobilized cells exhibited better tolerance to pH and temperature alterations than freely suspended cells and could be stored for more than 3 months without losing pendimethalin degrading ability. The immobilization of cells capable of degrading pendimethalin may serve as an ideal technique for the complete degradation of the herbicide in the environment.

Scopus preview - Scopus - Intro · Welcome to USC, New Delhi · Web of Science Master Journal · Scopus preview - Scopus - 2 E · ENHANCED DEGRADATION OF ·

scopus.com/sourceid/21100447128

Scopus Preview Author search Sources Create account Sign in

Source details

3 Biotech

Open Access

Scopus coverage years: from 2014 to 2019

Publisher: Springer Nature

ISSN: 2190-572X E-ISSN: 2190-5738

Subject area: Agricultural and Biological Sciences: Agricultural and Biological Sciences (miscellaneous) Environmental Science: Environmental Science (miscellaneous) Biochemistry, Genetics and Molecular Biology: Biotechnology

CiteScore 2018 2.61

SJR 2018 0.575

SNIP 2018 1.121

Show all documents · Set document alert · Save to source list

CiteScore CiteScore rank & trend CiteScore presets Scopus content coverage

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Journal Paper No -14

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
A review on various types of toxins	Vinutha Moses	BT	Pharamcophore	Jul -15	22295402	WOS

Pharmacophore 2015, Vol. 6 (4), 181-188 USA CODEN: PHARM7 ISSN 2229-5402

Pharmacophore
(An International Research Journal)
Available online at <http://www.pharmacophorejournal.com/>
Review Article

A REVIEW ON VARIOUS TYPES OF TOXINS
Aishwarya Vijayakumar*, Shobha G, Vinutha Moses and Soumya C
Department of Biotechnology, Sapthagiri College of Engineering
(Affiliated to VTU, Belgaum), Chikkasandra,
Bangalore- 560057, Karnataka, India

ABSTRACT

Toxins are poisonous substances which are produced naturally by organisms like plants, bacteria, algae, fungi, etc. They are also synthesized by man in the form of chemical pesticides, fungicides, etc. They are liberated into the atmosphere in the form of smoke from industries and into water bodies in the form of industrial effluents. Toxins cause harmful effects in humans in the form of ailments like food poisoning, caused by ingestion of food contaminated by microorganisms; cancer by inhalation of toxic fumes from industries etc. To prevent such ailments which may be fatal, one must take care to minimize exposure to sources of toxins and find alternative options which could help minimize pollution of the environment and make it safer for all organisms living in it.

Keywords: Toxins Contaminated, Pesticides, Pollution, Fungicides.

INTRODUCTION

Toxins are poisonous substances which, when ingested, inhaled or injected into an organism causes deleterious effects on the functioning of its organ systems. These could be either natural or artificial toxins. Natural toxins are synthesized in certain organisms as products of certain metabolic pathways and are generally used by them as a means of defense against predators. Artificial toxins are synthesized by human beings to eliminate harmful pathogens and pests which reduce the quality of life and the food we eat. Artificial toxins like smoke and harmful metals like mercury and lead are released into the atmosphere as industrial effluents. The effect of a toxin on living organisms is called toxicity and the branch of science which deals with various types of toxins and their effect on the metabolic activity of living organisms is called toxicology. Toxicity can be classified into four main categories namely, acute, sub acute, sub chronic and chronic toxicity, depending on the time taken for the appearance of symptoms and the severity of these symptoms. Acute toxicity occurs due to exposure to a particular toxin for short intervals of time. Acute toxicity to titanium dioxide is seen in experimental animals in the form of pulmonary inflammation and increase in heart rate.^{1,2} Tetrodotoxin, which occurs naturally in puffer fish causes symptoms of poisoning in patients within 24 hours.³ Consumption of 100 g of the fish could be fatal.³ Ingestion of agricultural pesticides results in appearance of symptoms within few hours, which could be fatal if treatment is not provided to the patient.⁴ Acute toxicity to Cu, Cr and Zn causes death, loss of equilibrium and bloating of abdomen in White Sturgeon.⁵ Acute toxicity to TiO₂ is manifested as necrosis of hepatocytes, swelling of the glomerulus, lesions in the brain, and a number of other symptoms.¹ In sub acute toxicity, the organism's

181

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 057

Journal Paper No -15

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number*	Index
A review on various types of toxins	Soumya C	BT	Pharmacophore	Jul -15	22295402	WOS

Pharmacophore 2015, Vol. 6 (4), 181-188 USA CODEN: PHARM7 ISSN 2229-5402

Pharmacophore
(An International Research Journal)
Available online at <http://www.pharmacophorejournal.com/>
Review Article

A REVIEW ON VARIOUS TYPES OF TOXINS
Aishwarya Vijayakumar*, Shobha G, Vinutha Moses and Soumya C
Department of Biotechnology, Sapthagiri College of Engineering
(Affiliated to VTU, Belgaum), Chikkasandra,
Bangalore- 560057, Karnataka, India

ABSTRACT

Toxins are poisonous substances which are produced naturally by organisms like plants, bacteria, algae, fungi, etc. They are also synthesized by man in the form of chemical pesticides, fungicides, etc. They are liberated into the atmosphere in the form of smoke from industries and into water bodies in the form of industrial effluents. Toxins cause harmful effects in humans in the form of ailments like food poisoning, caused by ingestion of food contaminated by microorganisms; cancer by inhalation of toxic fumes from industries etc. To prevent such ailments which may be fatal, one must take care to minimize exposure to sources of toxins and find alternative options which could help minimize pollution of the environment and make it safer for all organisms living in it.

Keywords: Toxins Contaminated, Pesticides, Pollution, Fungicides.

INTRODUCTION

Toxins are poisonous substances which, when ingested, inhaled or injected into an organism causes deleterious effects on the functioning of its organ systems. These could be either natural or artificial toxins. Natural toxins are synthesized in certain organisms as products of certain metabolic pathways and are generally used by human beings to eliminate harmful pathogens and pests which reduce the quality of life and the food we eat. Artificial toxins like smoke and harmful metals like mercury and lead are released into the atmosphere as industrial effluents. The effect of a toxin on living organisms is called toxicity and the branch of science which deals with various types of toxins and their effect on the metabolic activity of living organisms is called toxicology. Toxicity can be classified into four main categories namely, acute, sub acute, sub chronic, and chronic toxicity, depending on the time taken for the appearance of symptoms and the severity of these symptoms. Acute toxicity occurs due to exposure to a particular toxin for short intervals of time. Acute toxicity to titanium dioxide is seen in experimental animals in the form of pulmonary inflammation and increase in heart rate.^{1,2} Tetrodotoxin, which occurs naturally in puffer fish causes symptoms of poisoning in patients within 24 hours.³ Consumption of 100 g of the fish could be fatal.³ Ingestion of agricultural pesticides results in appearance of symptoms within few hours, which could be fatal if treatment is not provided to the patient.⁴ Acute toxicity to Cu, Cr and Zn causes death, loss of equilibrium and bloating of abdomen in White Sturgeon.⁵ Acute toxicity to TiO₂ is manifested as necrosis of hepatocytes, swelling of the glomerulus, lesions in the brain and a number of other symptoms.¹ In sub acute toxicity, the organism's

<http://www.pharmacophorejournal.com> 181

The screenshot shows the journal's website interface. At the top, there's a navigation bar with links like 'Home', 'About Us', 'Contact Us', 'Search', etc. Below this, a search bar is visible with the text '22295402' entered. The search results section shows 'Found 1 results (Page 1)' and lists the article 'A REVIEW ON VARIOUS TYPES OF TOXINS' by Aishwarya Vijayakumar et al. The article details include the publisher 'JADOUN SCIENCE PUBLISHING GROUP, KANCHANPUR, DHOLPUR DISTRICT, BARI, RAJASTHAN, INDIA, 328 041', the ISSN '2229-5402', and the categories 'PHARMACOLOGY & TOXICOLOGY | PHARMACOLOGY & PHARMACY'. There are also links for 'View profile page' and 'Requires free login'.

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Journal Paper No -16

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Index
A review on various types of toxins	Shobha G	BT	Pharamcophore	Jul -15	22295402	WOS

Pharmacophore 2015, Vol. 6 (4), 181-188 USA CODEN: PHARM7 ISSN 2229-5402

Pharmacophore
(An International Research Journal)
Available online at <http://www.pharmacophorejournal.com/>
Review Article

A REVIEW ON VARIOUS TYPES OF TOXINS
Aishwarya Vijayakumar*, Shobha G, Vinutha Moses and Soumya C
Department of Biotechnology, Sapthagiri College of Engineering
(Affiliated to VTU, Belgaum), Chikkasandra,
Bangalore- 560057, Karnataka, India

ABSTRACT

Toxins are poisonous substances which are produced naturally by organisms like plants, bacteria, algae, fungi, etc. They are also synthesized by man in the form of chemical pesticides, fungicides, etc. They are liberated into the atmosphere in the form of smoke from industries and into water bodies in the form of industrial effluents. Toxins cause harmful effects in humans in the form of ailments like food poisoning, caused by ingestion of food contaminated by microorganisms; cancer by inhalation of toxic fumes from industries etc. To prevent such ailments which may be fatal, one must take care to minimize exposure to sources of toxins and find alternative options which could help minimize pollution of the environment and make it safer for all organisms living in it.

Keywords: Toxins Contaminated, Pesticides, Pollution, Fungicides.

INTRODUCTION

Toxins are poisonous substances which, when ingested, inhaled or injected into an organism causes deleterious effects on the functioning of its organ systems. These could be either natural or artificial toxins. Natural toxins are synthesized in certain organisms as products of certain metabolic pathways and are generally used by them as a means of defense against predators. Artificial toxins are synthesized by human beings to eliminate harmful pathogens and pests which reduce the quality of life and the food we eat. Artificial toxins like smoke and harmful metals like mercury and lead are released into the atmosphere as industrial effluents. The effect of a toxin on living organisms is called toxicity and the branch of science which deals with various types of toxins and their effect on the metabolic activity of living organisms is called toxicology. Toxicity can be classified into four main categories namely, acute, sub acute, sub chronic and,

chronic toxicity, depending on the time taken for the appearance of symptoms and the severity of these symptoms. Acute toxicity occurs due to exposure to a particular toxin for short intervals of time. Acute toxicity to titanium dioxide is seen in experimental animals in the form of pulmonary inflammation and increase in heart rate.^{1,2} Tetrodotoxin, which occurs naturally in puffer fish causes symptoms of poisoning in patients within 24 hours.³ Consumption of 100 g of the fish, could be fatal.³ Ingestion of agricultural pesticides results in appearance of symptoms within few hours, which could be fatal if treatment is not provided to the patient.⁴ Acute toxicity to Cu, Cr and Zn causes death, loss of equilibrium and bloating of abdomen in White Sturgeon.⁵ Acute toxicity to TiO₂ is manifested as necrosis of hepatocytes, swelling of the glomerulus, lesions in the brain, and a number of other symptoms.¹ In sub acute toxicity, the organism's

<http://www.pharmacophorejournal.com> 181

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraaghatta Road,
Bangalore-560 057