

(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

## 3.4.3: RESEARCH PAPERS PUBLISHED BY TEACHERS (Journals Notified on UGC Website)

- Screenshot of Papers Where Link/Doi Not Available
  - 2019-20(2)
  - 2018-19 (3)
  - 2017-18 (4)
  - 2016-17 (0)
  - 2015-16(1)



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Antioxidant and Antibacterial properties of wine prepared from bananas-Panchal Durva, Ansari Aakifa, Pawar Apoorva, George Anila, Fernandes Neil, Pote Pooja, Stewart Miriam and Chakraborty Pampi. Research Journal of Biotechnology, Vol. 15 (6): 88-97, 2020. ISSN-2278-4535.

Research Journal of Biotechnology

Vol. 15 (6) June (2020)

## Antioxidant and Antibacterial properties of wine

prepared from bananas Panchal Durva<sup>1</sup>, Ansari Ankifa<sup>1</sup>, Pawar Apourva<sup>1</sup>, George Anila<sup>1</sup>, Fernandes Neil<sup>2</sup>, norva', George Anila', Fernandes Neil', Pote Pooja', Stewart Miriam' and Chalkraborty Pampi<sup>4</sup>

ubeslogt, N. Zoria's cellage, Mundui 488801, INDEA
varfanc Off Curgyan-Savarguee nod, Nadek - 422 222, INDEA
'pumpi chalkraborty/in are ren.

Bananas are cultivated on a large scale in India. A teaning we considerable mumber of fruits are wasted every year because it ripens fast and there is a lack of proper storage facilities. Over-ripen bunanas are still a good natural source of all the essential nutrients. Thus, the use of these over-ripe bananas in preparation of wine, a form with a longer shelf life is an attractive alternative. Here, the authors prepared banana wine using malolactic fermentation and explored its physicochemical, organoleptic and biological biological activities. Reducing sugars, volatile acids and sulphur di-oxide content were quantitatively estimated. After determination of the total phenolics content (0.163mg/ml) in the banana wine, its antioxidant activity (in vitro) was estimated by DPPH and ABTS assay which was found to be  $95.9 \pm 0.344\%$  and  $81.1 \pm$ 0.6% for 1:2 diluted banana wine respectively.

Macrophage cells (RAW 246.7) treated with the ta wine showed enhanced survival in the presence of oxidative stress. Antibacterial activity was evaluated using broth microdilution against Streptococcus pyogenes, Staphylococcus aureus, Escherichia coli and Klebsiella pneumoniae. The wine showed a bactericidal effect against all the chosen bacterial cultures. The study revealed that banana wine has significant antioxidant and antibacterial properties along with moderate taste.

antibucterial, oxidative stress, DPPH, ABTS.

Epidemiological evidence from many studies supported the notion that moderate wine consumption is beneficial to health. Fruit wines have shown to accumulate different phytochemicals during alcohol femientation which may psystemetas uning account rementation which may have antioxidinat and anti-microbial properties. The quality of wine is determined by various factors i.e. organic acids, carbohydrates, ethanol and polyphenols. The organic acids in the wine are mostly produced as by-products of both primary and secondary metabolism. These compounds are increased by the addition of enzymes and external microbes which acids the formeration energies. Some constrictions which assist the fermentation process. Some organic acids like malic acid and tartaric acid come mostly from the plant and other acids like lactate, succinate and acetate are

produced as a result of the fermentation process carried out by lactic acid bacteria either naturally present or added exogenously. This process is called as the malolactic fermentation which occurs either at the end or along with the primary fermentation<sup>5</sup>. The flavour of the wine partially depends on successful malolactic fermentation.

Very few studies have been carried out on the alcoholic products of benness to date. Banarias contribute about 2.7% of the total potassium content consumed by the average adult. It is also rich in antioxidants such as vitamins C, E and β-carotene. In previous studies, the banana wine was prepared using pectinase and u-amylase to hydrolyze pectin and starch respectively<sup>3</sup>. Mendonca et al<sup>18</sup> have shown the possible applications of S. cerevisiae in the banana pulp for the development of distilled spirits. Thus, in the present study, makefactic fermentation has been used to produce banana wine.

Polyphenols present in wine have been reported to have a variety of biological effects including antioxidant, anti-carcinogenic, anti-inflammatory and anti-microbial activities. Recent studies have shown the presence of many beneficial phenolic components like gallic acid, reoveratord, querectin etc. in the fruit wine which has been reported to inhibit various pathogenic microorganisms<sup>14</sup>.

Phenolic compounds in wine such as latein, catechins resventrol and quercetin act as the antioxidant. Among all, resventrol is widely studied which helps to reduce LDL from serium and also prevents aggregation of platelets. The present study aims to prepare banana wine from over-ripe bananas that are generally considered as waste and explore its physicochemical, organoleptic and biological properties. To the best of our knowledge, this is the first prospective investigation of anti-oxidant and anti-bucterial properties of

#### Material and Methods

Preparation of hanana wine: For the preparation of banana wine, over-ripen bananas (Masa acaminata) were purchased from local supermarket of Grant road, Mumbai, India. The over-tipen baranas were washed, peeled, cut and ground using a bentsh top food processor. The grounded bananas were adjusted with final water content in the ratio 1.3 (1 part of banana must so 3 part of water), followed by boiling for 45 minutes and filtered through a muslin cloth. The filtrate (pH-5) was inoculated with S. cerevisioe (1 gram per litre of filtrate) and 5% dextrose. The fermentation was carried out





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

• New addition to the flora of Goa-Anil Rajbhar and Ujwala Bapat, Phytotaxonomy, 18: pp62-64-2019. ISSN: 0972-4206.

PHYTOTAXONOMY Vol. 18, 2018, pp. 62-64 Date of Publication : October - 2010

#### New addition to the flora of Goa

PT

Anil Rajbhar\* and Ujwala C. Bapat\*\*

\*Research student, Department of Botany, St. Xavier's College,
Mahapalika Marg, Mumbai 400 001

\*\* Professor and Head, Department of Botany (Reid.) and Director (Reid.),
Blatter Herbarium, St. Xavier's College, Mahapalika Marg, Mumbai 400 001.

Email: \* taxonomy.rajbhar@gmail.com \*\* uchapat@gmail.com

Overalatio colocina Schrank belonging to family Leguminosae was observed growing in Jacinto Island of Goa (15°24'16.13"N, 73°51'45.32"E). Review of relevant literature indicated that Crossleria culveina was not reported earlier for the Flora of Goa, thus is a new addition to the flora of Goa.

Key Words: Jacinto Island; Flora of Goa; Crotalaria calycina Schrank

#### Introduction

Goa State lies in the Konkan region (west coast) of India and covers geographical area of 3702 km<sup>2</sup> (12). There are many Islands in the state of Goa in the estuaries and in the main sea, Jacinto Island is situated at the mouth of Zuari River. It is 0.23 km. inside from the coast (coordinate of 15°24'15' N & 73°51'53'E) and has an area of about 0.15 km2. The flora of this island resembles more or less the inland flora of Konkan coast. Floristic work on flora of Goa was done earlier by Dalgado (1898), Vartak (1966), Rao (1985-86) and Naithani et. al. (1997). About 1373 angiosperm species were reported from Goa. We had done the floristic work of Jacinto Island which is a part of dissertation work on flora of islands of Konkan coast, This study was undertaken to understand the differences (if any) and similarities between the main land flora and the island flora as well as to compare the flora of different islands of Konkan coast.

#### Materials and Methods

Regular field visits to Jacinto Island were made in the years from 2009 to 2019. A list of plants was prepared and the uncommon plant specimens were collected for identification and authentication. During field visits plant characters were noted and photographs of plants were clicked. Herbarium sheets were prepared for the future reference. The uncommon plants were identified and authenticated referring to the available literature and floras (1.2.4.8, 18, 18, 11).

#### Results and Discussion

We observed six species of Crotalaria viz. Crotalaria calycina Schrank, Crotalaria filipes Benth., Crotalaria pallida Aiton, Crotalaria prostrata Willd., Crotalaria triquetra Dalz. and Crotalaria verrucosa L. in Jacinto island.

Seventeen species of Crotalaria have been reported from the state of Goa S. D. R. and D. Crotalaria calveina Schrank has not been reported earlier from Goa.

Crotalaria calycina Schrank, Pl. Rar. Monac. T.
12, 1819; Baker in Hook. f., Fl. Brit. India 2: 72, 1876;
Woodrow in J. Bombay Nat. Hist. Soc. 11: 420, 1897;
Cooke, Fl. Pres. Bombay 1: 298, 1902; Ugemage, Pl.
Nagpur, 135, 1986; Nairne, Fl. Pl. West. India. 77,
1894; Karthikeyan & Anandkumar, Fl. Yavatmal 61,
1993; Puri & Jain in Bull. Bot. Surv. India 2: 332,
1960.

#### Description

An erect herb, stem simple or branched; densely clothed with appressed silky hairs. Leaves sessile, narrow-linear, acute, 12-15 cm long; stipules minute, hairy. Flowers few in lax racemes and solitary from leafy nodes, calyx large, densely clothed with long silky hairs, teeth all long, upper broad rather obuse; Corolla pale yellow, shorter than calyx. Pods linear oblong, included.

Flowering and fruiting: September-October

Distribution: About 10 individuals of the species were observed growing in a small area.

GPS Reading: 15°24'16.13'N, 73°51'45.32'E (Elevation 13.72 Meter)

It is an annual plant and was seen growing post monsoons till December. The occurrence of a few individuals of C. calycina Schrank in Jacinto island may be due to its seed dispersal by birds (through





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Ornamentation Around the Symbol of the Cross: A Comparative Overview-Jason Johns-AIC-Xplore, 9(1): pp 44-52.-2018, ISSN 2249-1878.

#### Ornamentations Around The Symbol of The Cross: A Comparative Overview

#### Jason Johns

PhD Scholar, Teaching Assistant & Visiting Faculty for Post- Graduation, Dept. of Ancient Indian History, Culture and Archaeology, St. Xavier's College, (Autonomous), Mumbai.

The symbol of the cross from its origin in a pre-Christian phase to its Christianization has gone through a long period of evolution spanning hundreds of years. The cross which was a symbol of shame and punishment for criminals became a Christian symbol in the Holy land representing the passion, death and resurrection of esus Christ. It is to be noted that this symbol became popular once Christianity became a popular religion and began to spread with the believers either under patronage or threat. The cross as a symbol itself began evolving with elongation, curves, equalization and ornamentation either on its surface or around it. The evolution of the cross and its ornamentation changes with region, group or sect of Christians and the meaning they gave to it. The ornamentation also represented various facets of Christian theology and philosophy as professed by these various sects. Further more one observes that with the regionalisation of the symbol of the cross - local elements like vegetation, fruits , fauna and cuttic symbols get incorporated , as seen in the cases of India, Armenia, etc. Thus the resultant combination of the cross symbol with its evolving and distinguishing ornamentation serve as a window into the coming of Christianity into those respective localities, how the two communities interacted, the level of their religio-intellectual interaction, etc. in the following paper the researcher aims at making a cross outural comparison between few of the ancient crosses like Nestorian Crosses, Armenian Khachkar, Persian Crosses in India , etc. Here along with the examination of the cross itself the ornamentation will be studied and put into context of the locality where these crosses are found, while making an attempt to separate what was originally brought by the early missionaries either in tangible or intangible form.

Amongst the many universal signs and symbols like the Star of David or Swastika or Crescent of Moon which spread throughout the world is the symbol of the Cross. This symbol like the others has spread across land and sea, from mountain tops to the deepest cavern. The symbol of the Cross is associated mostly to the Christianity and its various denominations or trends. As we observe the extent of it is almost worldwide with Crosses in the Americas. Africa, Asia, Russia, Europe, Australia, etc. The symbol of the Cross though very popular now has gone through a great journey to reach this universal status and spread. This can be traced in its form as a Christian Symbol and through its roots in a pre-Christian phase or era.

The cross is the crux of Christian life and worship and is integrated into ground plans or structures, so that activities occur under the sign of the cross. When one looks at a Cross, a symbol comprising of two perpendicular bars meeting at the centre is the best image we can recollect. But a question comes into our mind when we see variations, changes and ornamentations on this simple symbol emerge. The change can be as minute as a shift of the Cross bar from exactly the centre of the two equal length bars to a higher position on bars of unequal length. Both these symbols now become a localization and belong to separate denominations or trends viz. the Greek and Latin respectively. The question which arises in one's mind as previously stated could be a form of inquiry in the most common of situation on seeing either a pendant or tattoo of an ornamented Cross, as to what do the ornamentation or designer elements on

Xplane - The Xevier's Research Journal, Vol. 9, Issue 1, December 2018

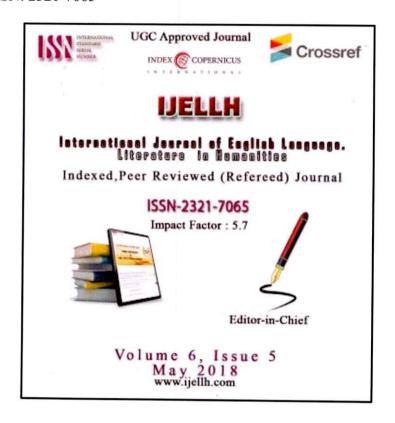
(22-45-55)





(AUTONOMOUS)
5, Mahapalika Marg, Mumbai - 400 001, INDIA.
© 2262 0661/65

• Improving writing skills of commerce students-Jotiram Gaikwad, Tripti Karekatti, International Journal of English Language Literature in Humanities, 6(5): pp 1122-1131-2018- ISSN: 2321-7065







(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

HELLH

Volume 6, Issue 5, May 2018

1122

\*Jotiram Gaikwad

St. Xavier's College-Autonomous,

Mumbai, India

Email: jotiramg274@gmail.com/jotiram.gaikwad@xaviers.edu

\*\*Tripti Karekatti

Department of English, Shivaji University,

Kolhapur, India

Email: triptikarekatti@gmail.com

#### IMPROVING WRITING SKILLS OF COMMERCE STUDENTS

#### Abstract

English writing skill is an essential requirement for the students who want to make carrier in the global market. However, most of the commerce students lack English writing skill. The present study is concerned with the development of writing skills in English of the undergraduate commerce students. It is an experimental research and it was conducted on twenty students of First Year of Bachelor of Commerce (F.Y.B.COM.). English was taught over a period of three months as per the designed teaching/learning module (TLM) developed by the present researcher. The data was collected through an essay writing task before and after the teaching to assess, evaluate and compare their performance. The research aimed to test the progress of the students from the pre-test to the post-test in writing skills of English. The analysis of collected data shows improvement in students' performance from the pre-test to the post-test as a result of teaching learning module (TLM).

Keywords – writing skills in English, global market, experimental research, teaching/learning module (TLM), essay writing task

#### 1. INTRODUCTION

Writing refers to "the expression of ideas in a systematic way to organize the graphic conventions of the language" (Rivers, 1968, p. 243); "complex, cognitive process that requires sustained intellectual effort over a considerable period of time" (Nunan, 1999, p.





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

 Technology and English Language Teaching-Jotiram Gaikwad, Research Journey Multidisciplinary International E-Research Journal, Special Issue 48: pp 25-32, 2018; ISSN 23487143

'RESEARCH JOURNEY' International Multidisciplinary E- Research Journal

Impact Factor - (CIF) - 3.452. (SJIF) - 3.009. (GIF) -0.676. (2013) UGC Approved No. 40705 & 44117 Special Issue 48 Digitalization of English Language & Literature Teaching ISSN: 2348-7143 February 2018

#### Technology and English Language Teaching

#### Mr. Jotiram Janardan Gaikwad

Assistant Professor, St. Xavier's College-Autonomous, 5, Mahapalika Marg, Mumbai - 400 001, e-mail: jotirumg274@gmail.com Mobile: 8850478223

#### Abstract:

The present paper is on the use of technology in the English Language Teaching (ELT) classroom. It discusses different technological tools such as Language Lath, Computer Assisted Language Learning (CALL), Computer Mediated Communication (CMC), and Information and Communication Technology (ICT) that assist teaching and learning process of English language. It also discusses the advantages of using technology in the ELT classroom. This paper is an attempt to highlight the use of various technologies for teaching English based on views expressed by the experts' from time to time and fifteen years teaching experience of the present writer. Thus, the aim of this paper is to draw the attention to the fact that a teacher can make teaching of English language more interesting, practical and student oriented using technology.

Keywords: Technology, English Language Teaching (ELT), Language Lab, Computer Assisted Language Learning (CALL), Computer Mediated Communication (CMC), Information and Communication Technology (ICT)

#### Introduction:

English, a language imposed on the native speakers by the colonies, has now emerged as the global language of communication or the language of international communication. Its use and importance has been increasing day by day. Now, majority of the world's population is using this language and many nations have given it the official status. Even countries like Russia, Japan and China which used their native languages as languages of education, instruction and communication so far, are increasingly turning to wain themselves in the use of English language.

In India, today, English has become the mainstay of administration, higher learning, technology, science and business. It has very successfully wanded off all the resistance from the nativist lobby to establish itself as the most important language in India. Today, knowing English means empowering oneself and using it effectively means gaining easily accessibility and acceptability in the emerging consumerist, market driven society. Due to it, the demand for the better performance of English has been constantly increasing. Hence, as said by Jesa (2005: 17), "the aim of teaching English is to make the learner an effective user of the language".

ELT has always been a chief feature of Indian academia and experimented over the past 100 years with various teaching methods like Grammar Translation Method, Direct Method, Dr. West's New Method, Acido-Lingual or Aural-Oral Method, Structural Method, Functional Method, Reading Method, Army Method, Bilingual Method, Total Physical Response, Silent Way, Communicative Approach, etc. All these methods were important in their own way, but none has remained ever popular with English teachers, due to the ignorance of some features like the teaching techniques, learner autonomy, use of various kinds of teaching materials, etc.

25

Website - www.researchiourney.net

Email - researchjourney 2014 gmail.com



PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.

NAAC SSR Cycle 4 (2015-2020): 3\_4\_3\_Screenshots\_Research\_Papers



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Lectotypification of Doronicum hewrense Dalzell & Vicoa cernua Dalzell (Asteraceae)
 Rajendra D. Shinde and Rajdeo Singh, Journal of Indian Bot. Soc., 96 (3&4): 302-304,
 2017; "ISSN: 0019-4468, e-ISSN:2455-7218."

F. Indian bet. So

e-ISSN:2455-7218, ISSN:0019 - 4468

Vol. 96 (3&4) 2017 :302-304



#### LECTOTYPIFICATION OF DORONICUM HEWRENSE DALZELL & VICOA CERNUA DALZELL (ASTERACEAE)

#### RAJDEO SINGH AND RAJENDRA D. SHINDE\*

Department of Bosans, St. Xanser's College, Monthes – 400 601, Mathematica, India \*Corresponding suffice-raigning shinds/sinaverse.edu Oute of online publication: 31st December 2017

Durings and henrouse Dulinell and Flence cereas Duhedl two plants whose type specimen were missing are lectorypided

Keywords: Asternoesie, lectotype, Daronicum houvente. Viena cormus

Senecio L. is a cosmopolitan genus belonging to Asteraceae, one of the largest families of flowering plants. Globally, the genus comprises ca. 1,000 species. (Mabberley 2008). In India, it is represented by 49 species and six varieties, of which 21 species are endemic (Singh et al. 2015). Senecio hewrensis (Dalzell) Hook. f. (Doronicum hewrense Dalzell), one of the endemics, has been known from Maharashtra and Rajusthan states.

The genus Pentanema Cass is represented by 18 species and distributed in Africa, Central, South, and Southeast Asia. In India; it is represented by three species and one variety (Karthikeyan et al. 2009). In Maharashtra, it is represented by two species. Of these P. cermum (Dalzell) Ling (Vicoa cermua Dalzell) is distributed in Bhutan, China, Nepal and India (Central, East, North and Peninsular India).

The present communication is a part of the revisionary studies of Asteraceae of Maharashtra. While examining the protologues and studying the type specimens of the members of this family, we realized that few taxa names remain untypified and warrants typification. We found that wathin the protologue of Doronicum hewrensis and Vicoa cernua no types were cited: therefore following Aris. 9.2 and 9.11 of the Melbourne Code (McNeill et al. 2012), we herewith designate a lectotype and provide an image of the designated lectotype for the relevant species names.

Senecio hewrensis (Dalzell) Hook. f., Fl. Brit. India 3: 346, 1881.

Doronicum hewrense Dalzell in Dalz. & Gibs. Bomb. Fl. 130, 1861.

Hymenatherum hewrense (Dalzeli) M.R. Almeida, Fl. Maharashtra 3A: 116, 2001.

Type: INDIA, Maharashtra, Pune District, Junnar (as 'Jooneer'), 1860, N.A. Dalzell no. 2. (lectotype K: 000852225!, image), designated here.

#### Nomenclature note

Dalzell (1861: 130) did not cite any specimen in the protologue; rather he provided a brief description and information on the locality and phenology as "common in rocky places around Jooneer (Junnar) and flowers in July-August."

We traced two sheets viz., K000852225 and K000852226, housed at K. The former sheet has two plants pusted in left corner. It has annotations by Dalzell as "from Deccan" and floral character in brief, number "two" is written on it. In contrast, the later sheet has total 6 plants pasted throughout. This sheet is neither annotated by Dalzell nor having any diagnostic character. Though the sheet no. K000852225 does not show any precise locality as in protologue, but the label locality 'Deccan', floral diagnostic character and Dalzell's own annotation are sufficient to fulfill the Art. 9.11 of the ICN. And therefore, we berewith designate K000852225 as the

Received on hour 12, 2017

www.influshotoc.cog

Accepted on September 94, 2017







(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

 Meta narratives of Urban Demography: Revisiting Mill lands then and now-A Case study of Mills of Mumbai-Avkash Jadhav-History-Indica, Vol.54, pp. 176-190-2017-ISSN 0019-686X

> 'Indica', Journal of the Heras Institute of Indian History and Culture Vol.54, September, 2017. pp. 176-190 (ISSN.0019-686X).

#### Meta narratives of Urban Demography: Revisiting Mill lands then and now- A Case study of Mills of Mumbai

#### Introduction

In ancient times the western region of the north Konkan coast of India was known only for the port of Sopara and the caves at Kanheri, Mandepeshwar and Elephanta. The geopolitical and religious dynamics of the present territorial zone under study was silent, but effectively contributory. The advent of various dynasties in medieval India, eventually made Delhi the seat of command and once again for almost six centuries, the city of Bombay (now Mumbai) was overlooked of its potential growth. The advent of the British East India Company allowed the shift of power from Delhi to Bengal when the Company established their first Presidency there, which was followed by Madras. Incidentally, the city of Bombay which was an archipelago of seven islands was not very well connected even during that era, it was inaccessible.

The island (supposedly a liability) was passed on to the British in 1661 as dowry for the matrimonial alliance of Catherine of Braganza to Charles II. The island was further rented to the East India Company by Charles II for a mere rent of 10 pounds of gold per annum. (Calculating the amount of 10 pounds to Indian rupee today, it would come to Rs.900/ approximately, with that amount, it would have been impossible to buy even buy one square foot of land today in Mumbai or even in the peripheral area). Further, the British established their centre of trade in Surat and gradually Bombay also witnessed some migration of traders and the mercantile class.

The following year the transfer of Bombay from the British Crown to the East India Company was done and an official proclamation (which remained a dead letter) stated that 'all acquisition of land by individuals prior to 1661 proceeded from imperfect right'. A few years later, in 1674 an important step was taken in the direction of the development of land in Bombay, as private property. It gave recognition to all the land then occupied by the natives, subject however to one

Dr. Avkash Jadhav, Head and Associate Professor, Department of History ,St. Xavier's College, University of Mumbai, Mumbai. India. Email: avkashj@rediffmail.com

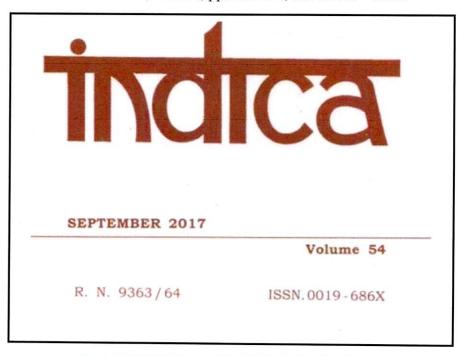




(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001,

INDIA. © 2262 0661/65

Two Legends: Fr. Henry Heras and The First Dastur of Navsari Meherjirana, Pearl pastakia Indica, Vol.54, pp. 172-174, 2017.0019 - 686X



CONTENTS	
Editorial	03
Father Noel Sheth S. J.: 1943-2017 Errol D'Limir S. J.	06
ARTICLES	100
"Körvariald", "Dingala-Pingala", and the Cultural Riches of by Mariam Dosval	Kutch 07
Craft As Identity Exploring the Material Culture of Kutch by Mariam Dorical	26
Aspirations, Education and Culture: The Transition from Rura Urban Lifestyles	
by Arun De Souzu S. J.  Colonial Perceptions of Disease and their Linkage to the Environment	39
by Mridula Ramanna  Sculptural Representations from the Vijayanagara Period of Sa  Sites of the Elemental Litigas and their Modern Counterpa  by Anda Vergheie	irts
Curing, Comforting, Coping: the "War Hospitals" in Bombay, by Shubhada Pandya	
Sānjhi: A Spiritual Art Form of the Pustimärga by Mangala Purandare	117
Two Legends: Fr. Henry Heras and The First Dastar Meberjina of Navsaer by Pourl Paractus	
Meta Narratives of Urban Demography: Revisiting Mill Lands	-
Then and Now - A Case Study of Mills of Mumbai by Arkash Jadhay	
rates and Now - A Case Study of Mills of Mumbai	176



NAAC SSR Cycle 4 (2015-2020): 3\_4\_3\_Screenshots\_Research\_Papers



(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

172

INDICA 54

# TWO LEGENDS: FR. HENRY HERAS AND THE FIRST DASTUR MEHERJI RANA OF NAVSARI

by

## PEARL PASTAKIA

Fr. Henry Heras S. J. was said to have spanned the ranges of history, art and culture like a Colossus. His many-faceted genius is widely celebrated by historians who trained under his guidance. The Heras Institute of Indian History and Culture on the campus of St. Xavier's College, Mumbai, enables us a glimpse of his vast legacy to art history and research. An inspired Jesuit, Fr. Heras commands the awe and admiration of scholars and academics at large while his splendid humanism is tirelessly commemorated by his thankful students.

It was on my first visit to Navsari, that I discovered, to my delight, the link between Fr. Heras, an oft-heard name at seminars and symposia at St. Xavier's College, and the artistic representation of an eminent sixteenth century Zoroastrian priest. The name of Fr. Heras is mentioned on a metal plaque affixed to a wooden frame of an imposing portrait inside the 250 year old Atash Behram at Navsari. It is the painting of the First Dastur Meherji Rana, illustrious Zoroastrian priest of Navsari, who lived in the time when Emperor Akbar was at the zenith of his power and when Navsari, in Gujarat, was a bastion of the Parsees in India. In fact it is still considered to be the seat of the Zoroastrian orthodox. The significance of this place is evident from the fact that the oldest and the highest ranking Fire of the Parsees in India (christened 'Iranshah'), centuries ago, travelled to Navsari where it was 'enthroned' (installed). According to the Zoroastrian scholar, Shahpurji Hodiwala the Holy Fire remained 'enthroned' in Navsari for over three hundred years (1419 CE - 1714 CE)

Today, a life-size painting of Meherji Rana (d. 1596 CE) faces one of the Prophet Zarathushtra, adorning the Hall which is anterior to the sanctum of the present Atash Behram at Navsari.





(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

 Dr. Radha Kumar, Buddha's Theory of Madhyama Pratipat–Its relevance in Economic policy Formulation. Dharmadoot–MahaBodhi Society of India–International Pali Institute–Sarnath, Varanasi (UP) India, Vol 8, 2017; ISSN 2347-3428.

## Buddha's Theory of MadhyamaPratipat - its Relevance in Economic Policy Formulation Pr. Radha Kumar

Dr. Radha Kumar

Dr. Radha Kumar

Associate Professor, Department Of Ancient Indian Culture
St Xavier's College-Mumbai
St Xavier's College-Mumbai
E-mail: radha.kumar@xaviers.edu

The discipline of economics in the classic sense is the star of human behavior with regards to efforts and activities that of human behavior with regards to efforts and activities that of human behavior with regards to efforts and activities that is concern aimed to satisfy human effort which is directed towards creat with the aspect of human effort which is directed towards.

There is no doubt that creation and production of wealth been an important endeavor of human life and living. The various reflect the consistent attempt that the human being ources reflect the consistent attempt that the human being ources reflect the consistent attempt that gives contrived and is striving, to create a quality of life that gives condended and is striving, to create a quality of life that gives condended and is striving, to create a quality of life that gives condended and is striving, to create a quality of life that gives condended and is striving, to create a quality of life that gives condended and enhances his over all well-being. Status, power and positive socio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy, is a direct fall out of the same secio-political hierarchy.

In this context, it would add yet another dimension course if there is a study of the development of Economic historical context and in particular to deliberate stence of economic activity which centered around meter of production, consumption, distribution and enhanced what was the difference?

ce, my very humble attempt will be to seek your atter

Whether there was a synergy? A synergy of an in perspective which was holistic and all encompassing

Dharmadoot Kartika Purnima 2017





(AUTONOMOUS)

 Mahapalika Marg, Mumbai - 400 001, INDIA.
 2262 0661/65

 Glacier Changes in the Bhaga Basin of the Western Himalaya Derived from Remote Sensing and GIS Techniques-Farjana Birajdar, G. Venkataraman and Hrishikesh Samant, Journal of Indian Geological Congress, 7(1): pp 75-78, 2015; ISSN 2229-435X.

Jour. Ind. Geol. Cong., Vol.7(1), June 2015, pp.75-78.

#### Glacier Changes in the Bhaga Basin of the Western Himalaya Derived from Remote Sensing and GIS Techniques

Farjana Birajdar<sup>1</sup>, Gopalan Venkataraman<sup>1</sup> & Hrishikesh Samant<sup>2</sup>

<sup>1</sup>DST-Woman Scientist & Adjunct Faculty respectively, Centre of Studies in Resources Engineering (CSRE),
Indian Institute of Technology Bombay, Powai, Mumbai • 400 076 (Maharashtra)

<sup>2</sup>Associate Professor & Head, Department of Geology, St. Xavier's College, Mumbai • 400 001

Email: {arsiana.birajdar@iibt.arc.in}

Abstract: In the mid and high latitudes, glacier fluctuations and glacier-climate interactions are convincingly well studied and fairly documented but glaciers in the tropics, such as the low-latitudes are typically harder to access due to harsh climatic conditions and rough terrain, and therefore less well understood. In order to understand the fluctuations in areal extent of Himalayan glaciers, an attempt has been made towards monitoring the changes in glacierized area and termini lying between 3800 and 6500 m as I of Bhaga basin (32°28°19.7-33°0°9.°N; 76°56°16.3°-77°25′23.7°E) Western Himalaya. The Bhaga basin covers an area of 1–1695.63 km² having 69 glaciers occupying glacierized area ranging from 0.03 km² to 29.28 km². Glaciers extents are delineated using False Color Composite (FCC) of IRS-P6-LISS III imageries of 2001 and 2011. Results indicate that 69 glaciers covering an area of 294.5° as km² in 2001 has been reduced to 291.40° ± 5.33 km² in 2011; a loss of 1.09 ± 0.81% in glacierized area within a period of 10 years. Between 2001 and 2011, the average rate of recession was estimated 0.32 ± 0.01 km a² with mean rate of retreat in terminus 3.84 ± 0.52 m a². The majority of glaciers in Bhaga basin are found undersized (<1 km²), narrow and debris free resulting more melting with higher rate of retreat. The glacier retreat have also been correlated with their elevation and observed that the glaciers lying between 4000 and 5000 m as lost more area than glaciers lying >5000 m ad.

Keywords: Western Himalaya, Bhaga basin. Glacier areal & longitudinal retreat, Remote Sensing, GIS.

#### INTRODUCTION

Himalaya is the youngest mountain chain and the largest range of Hindu Kush-Himalayan region. Lying between Latitudes 260 and 350 N and Longitudes 740 and 950 E (Ives J. D., 1989) it extends between Pamir in the west to Mishami Hills in the east. According to recent inventory there are 9,575 glaciers in Indian Himalaya covering an area of 37,466 km2 (Kaul, M.K., 1999; Raina, V. K., 2008; Sangewar, C.V., 2009). The Indian Himalaya covers 12 states of India with glaciers mainly located in the five states: Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunanchal Pradesh. There are many peaks above 7000 m and 6000 m (Ramakrishnan, M., 2008). Popularly known as the Third Pole and Water tower of Asia (Dyurgerov, M. B., 1997). Himalaya is the source of drinking water, irrigation, navigation and natural energy for more than 800 million people residing under its catchment (Bolch, T., 2012). The three major glacier-fed river systems, the Indus, the Ganges and the Brahmaputra, provide close to 50% of the annual utilizable surface water resources (690 Km3) of the country (MOWR, 2008), with significant contributions coming from the glacier and seasonal snow melt (Ramanathan, A.L., 2011).

Apart from playing a vital role in hydrology, the glacial terrain also influences both local and global climate. Himalaya acts as a barrier for the moist and humid wind from the South West monsoon going north and effectively stops western disturbances coming from Northwest penetrating into Indian sub continent.

Himalaya significantly affects Indian Summer Monsoon (UNEP, 2009). The first official seasonal monsoon forecast was issued by Sir Henry Blanford in 1886 which was based entirely on Himalayan snowfall (Munot and Krishna Kumar, 2007). The Hindu Kush-Himalaya (HKH) which includes Himalaya, Hindu-Kush and Karakoram are fed by two major weather systems viz. the Indian Summer Monsoon (ISM) and the mid-latitude westerlies (Benn and Owen, 1998). The influence of these two weather systems varies spatially such that most of the southern and eastern part of Himalaya experiences a pronounced summer precipitation (monsoon dominated) which declines sharply northward across the main Himalaya. The mid-latitude westerlies are responsible for a winter precipitation maximum at the extreme west of KHK, as a consequence of moisture being adverted from the Mediterranean, Black and Caspian Seas (Benn and Owen, 1998). The westerlies are a more important moisture source in the northwest (Bolch et al., 2012): about two-thirds of the high-altitude snowfall in the Karakoram is due to westerly cyclones, mainly in winter, whereas in the southeast more than 80% is provided by the summer monsoon (Bookhagen and Burbank, 2010).

#### DATAUSED

IRS P6 LISS III data of 2001 and 2011 has been used to estimate the glacier changes. False color composites for IRS P6 LISS III setellite data with standard band combinations such as 2 (0.52-0.59 µm), 3 (0.62-0.68 µm) and 4 (0.77-0.86 µm) are used for the delineation of the glacier extent. Survey of India Topographical

\*Delivered at the 19\* Convention of Indian Geological Congress & International Conference on "Climate Change & Namual Resources Development Serategies: Risk Management and Governance of Mountainous Region" organized jointly with Department of Geography. Ragiv Gandhi University, ITANAGAR, November 27-29, 2014.

