# 3.2.1 Number of papers published per teacher in the Journals notified on UGC (UGC CARE LIST JOURNALS) website during the year 2021-22

Sr. No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal
1	Seasonal Fluctuation of Rice Brown Planthopper (Homoptera: Delphacidae), Nilaparvatalugens (Stal) - A Major Paddy Pest in Central India	Madhukar F. Jadhao and Arti A. Salwe	Zoology	Journal of Scientific Research	2021-22	0447-9483	Journal Link- https://internet.bhu.ac.in/research_pub/ jsr/Volume_65_06_2021.html  Paper Link- https://internet.bhu.ac.in/research_pub/ jsr/Volumes/JSR_65_06_2021/Manuscri pt%2025.pdf
2	Biology of a Pentatomid Bug Amyoteamalabarica (Fabricius) and its Predatory Efficiency in Rice Field of Vidarbha, India	Barsagade D.D. and Salwe A. A.	Zoology	International Journal of Zoological Investigations	2021-22	2454-3055	Journal Link- https://mjl.clarivate.com:/search- results?issn=2454- 3055&hide_exact_match_fl=true&utm source=mjl&utm_medium=share-by- link&utm_campaign=search-results- share-this-journal Paper Link- 4514553453lssueSpecial 4 (1).pdf
3	Sahitya VishayakKrantikariBhu mikechiAwashyakata	Renukadas Ubale	Marathi	ParivartanachaWats aru	2021-22	2250-3145	http://www.pvatsaru.com/pvatsaruweb/ frontend/articale/show/3570

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## Seasonal Fluctuation of Rice Brown Planthopper (Homoptera: Delphacidae), Nilaparvata lugens (Stal) - A Major Paddy Pest in Central India

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Abstract: Among the 5 species of sap feeders belonging to order Homoptera identified in the present investigation in both rabi and kharif seasons, Nilaparvata lugens was infesting rice crop very commonly and thus representing major pest status in Bhandara district (a rice bowl of state) of Maharashtra (central India). The overall population growth rate and peak density of N. lugens during rabi season was much lower as compared to the kharif season. The peak population of N. lugens was observed during the late kharif seasons from October to November. Another peak appeared during the rabi season from April to May. The infestation of N. lugens appeared in appreciable number at the grain filling stage of crop. The correlation analysis study showed that in rabi season, N. lugens exhibited highly positive correlation with relative humidity and significant negative correlation with maximum temperature whereas it showed highly significant negative correlation with relative humidity and minimum temperature during kharif season. The linear regression equations derived from the data may help in predicting the occurrence of these major pests in rice ecosystem of this region.

Keywords: Rabi, Central India, Correlation, Kharif, Nilaparvata lugens, Paddy pest, Regression.

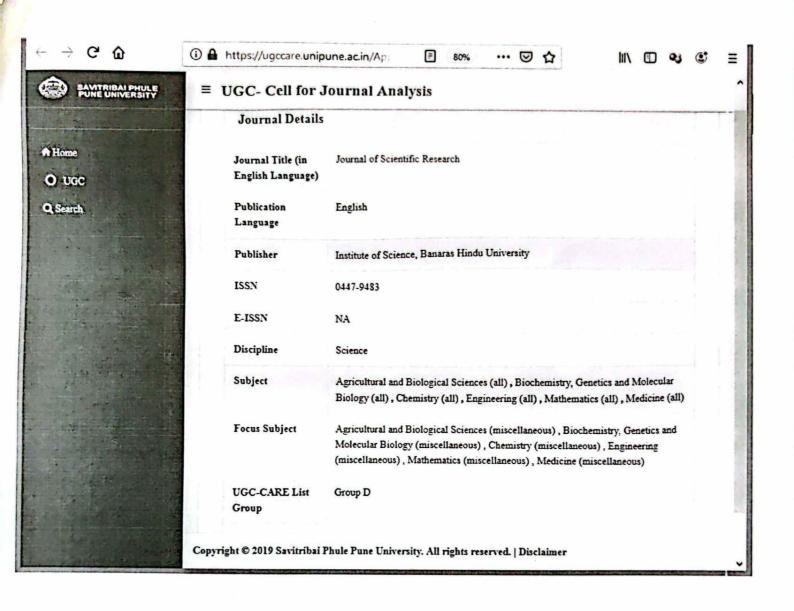
### I. INTRODUCTION

In India, rice (paddy), Oryza sativa L. is a staple food for over 55% population and is grown in almost all the states. Despite having the largest area under rice, its yield is among the lowest in the world (Rangi, 1993). The insect pests constitute one of the major yields limiting biotic stresses for rice crop throughout the world. About 300 species of insects have been reported to attack rice crop in India, of which 20 have been

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found to be the major pests (Pathak, 1967) causing 21 to 51 percent yield losses (Singh and Dhaliwal, 1994). The present paper describes the seasonal incidence and correlat on between weather parameters and population of a major pest, Nilaparvata lugens in the rice ecosystem of Bhandara district of eastern Maharashtra (central India) in relation to climitic conditions of this region.

extensively in the oil, gas and chemical industries because of its outstanding mechanical properties. The use of steel is also one of the effective strategies to maximize profit and reduce cost as compared to expensive corrosion resistant alloys. In many industrial applications related to oil and gas processing such as pipeline cleaning, pipeline/acid descaling and oil well acidizing, the use of mineral acids (usually hydrochloric acid) is still an effective method for improving productivity. This process however endangers the life of steel structures as a result of a cid driven corrosion. In order to prevent this undesirable reaction, corrosion inhibitors are often added to the acid solution dur ng acidification process (Hassan AR., and Gbadeyan JA., 2015; Ferdows M., et al.2009). Organic compounds, contain ng functional electronegative groups and  $\pi$ -electron in triple or conjugated double bonds are usually good inhibitors (Cano E et al 2004; Ghailane T., et al.2013). Heteroatoms, such as sulpl ur, phosphorus, nitrogen and oxygen, together with aromatic ri igs in their structure are the major adsorption centres (Goulart C M., et al.2013; Bentiss F., et al 2005). The planarity (g) and the lonely electron pairs in the heteroatoms are important features that determine the adsorption of these molecules on the meta lic surface (Hegazy MA., et al.2013; Hu SQ., et al.2010). The ise of corrosion inhibitors is one of the most effective measures for



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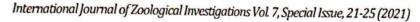
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# Biology of a Pentatomid Bug *Amyotea malabarica* (Fabricius) and its Predatory Efficiency in Rice Field of Vidarbha, India

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Abstract: Amyotea malabarica (Fabricius) (Heteroptera: Pentatomidae: Asopinae) is a predaceous stink bug. Life cycle of A. malabarica was studied in rice fields of east Vidarbha, India during Rabi season of 2018-20 on its prey, Riptortus linearis (Fabricius) (Heteroptera: Alydidae). The female laid 180 eggs in 4 to 8 batches on upper surface of leaves and each batch consisting of 20 to 45 eggs. The egg was barrel shaped, convex ventrally, flattened dorsally and measured 1.0±0.047 mm, 0.76±0.02 mm in length and width, respectively. The percentage of hatchability was very low (60%) and incubation period was 8.3±0.33 days at 30 to 35 C. Pre-oviposition and oviposition period was 1 to 3 days, respectively. First, second, third, fourth, and fifth instar nymphal period were 4±0.57, 4.3± 0.33, 5.3±0.33, 4.6±0.33 and 5.6±0.33 days, respectively. The mean consumptions of prey by second, third, fourth and fifth instar were 4.3±0.33, 8.6±0.33, 17.6±1.4 and 26±1.1 preys/bug, respectively, while adult fed on 39±0.5 prey/bugs. In entire life a single A. malabarica killed 96.0±3.7 preys. The nymphs of A. malabarica show cannibalism behaviuor in scarcity of food only. Total developmental period from egg to adult was 32.3±2.02 days. Longevity of female was longer (11 to 27 days) than male (10-25 days). Present study provides important life history information of A. malabarica which is natural bio-agent against pests found in rice fields.

Keywords: Amyotea malabarica, Biology, Predatory efficiency, Riptortus linearis, Rice fields

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### Introduction

Amyotea malabarica (Fabricius) (Heteroptera: Pentatomidae: Asopinae) is a brilliantly reddish coloured bug with black spots on dorsal surface and alternate white and black transverse lines on ventral side of abdomen. The bug is widely distributed in Bangladesh, Borneo, Burma, Celebes, China, India, Indonesia, Japan, Java, New Guinea, Phillipines, Sumatra, Sri Lanka and Taiwan in rice, cotton, soybean and other crop ecosystems

(Thomas, 1994). In India, it is recorded in several states (Salini and Viraktamath, 2015). Both nymphs and adults are predatory feeding by sucking the body juice of several insects, including rice pests such as rice bug *Leptocorisa acuta* (Thunberg), *Nezara viridula* (Linnaeus) (Singh *et al.*, 1973) and lepidopteran larvae (Pati and Mathur, 1986). In Vidarbha (Maharashtra) *A. malabarica* was observed to consume a number of



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वर्गणीचे दर: वार्षिक: ६०० रु., त्रैवार्षिक: १,६०० रु., दशवार्षिक: ५,००० रु., सॉफ्ट कॉपीसाठी वार्षिक २०० रु., सॉफ्ट + छापील ७०० रु. वरील पत्त्यावर ई मनी ऑर्डर, चेक किंवा डिमांड ड्राफ्टने वर्गणी पाठवावी. 'परिवर्तनाचा वाटसरू' या नावाने चेक / डिमांड ड्राफ्ट असावा.

बँक ट्रान्सफरने वर्गणी भरण्यासाठी तपशील बँक ऑफ इंडिया, फर्ग्युसन कॉलेज रोड शाखा, पुणे । बचत खाते : Pariwartanacha Vatsaru बचत खाते क्र. : 051410110013969 । आयएफएससी क्र. : BKID0000514 । एमआयसीआर क्र. : 411013014 Google Pay साठीचा मोबाईल नंबर : 8888708963 युपीआय पेमेंटसाठी बार कोड



युजीसी केअर ग्रुप 1मध्ये 'परिवर्तनाचा वाटसरू' पाक्षिकाचा मिटडिसिप्लिनरी या कोटीक्रमांतर्गत समावेश केला आहे.



प्रसाद वोंगळ चिवडिती। दंभाचे आवडी बहिराट अंधळे। सेवटासिं काळे होईल तोंड। सोन्यासेजारीं तो लाखेची जतन। संतत ते गुण जैसे तैसे। सेव्यसेवकता न पडतां ठावी। तुका म्हणे गोवी पावती हीं।।

- संत तुकाराम (अभंग क्र. १३९७)

स्नात्नाद्माणे ९४व्या अखिल भारतीय मराठी साहित्य संमेलनाची चर्चा प्रसारमाध्यमांमधून जोरकसपणे झडू लागली आहे. नुकताच ब्राह्मण महासंघाने या साहित्य संमेलनात गीतकार जावेद अख्तर व गुलजार यांना निमंत्रण देण्यास कडाडून विरोध

लेखक तुमसर, जि. भंडारा येथे एस. एन. मोर कला-वाणिज्य महाविद्यालयात मराठीचे सहाय्यक प्राध्यापक आहेत.

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