



**IJIRCCCE**

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

**Volume 10, Issue 5, May 2022**

**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA

**Impact Factor: 8.165**

 9940 572 462

 6381 907 438

 [ijircce@gmail.com](mailto:ijircce@gmail.com)

 [www.ijircce.com](http://www.ijircce.com)

# ReconPest- A Web-based Pesticides Learning Website

Pratik S. Chopade<sup>1</sup>, Suman U. Puri<sup>2</sup>, Sandhya V. Gaikwad<sup>3</sup>, Shruti C. More<sup>4</sup>, Vaishnavi S. Devale<sup>5</sup>

Head of Department, Department of Computer Engineering, JSPM's RSCOE Polytechnic, Pune, India<sup>1</sup>

Lecturer, Department of Computer Engineering, JSPM's RSCOE Polytechnic, Pune, India<sup>2</sup>

Students, Diploma in Computer Engineering, JSPM's RSCOE Polytechnic, Pune, India<sup>3,4,5</sup>.

**ABSTRACT:** In today's world, education is speeding up with ease of its availability. Each willing person who wants to learn some concept can get it by visiting related websites. We are bringing this facility to such sector where learning material is not provided at one stop platform. Generally, the students who study agriculture are dependent on their practical knowledge and books. They make websites use for the updates related to study. But what if they want to read their syllabus module in bus with proper format and authenticated knowledge without any hinderance? So, to overcome this problem we developed "ReconPest (A free Learning Website)". ReconPest is a free learning website, and great platform for students to learn and teach. Every Student or any learner can get access to the information related to Pesticides. It helps in enhancement of knowledge and also encourages the spirit to learn more about perseverance of nature.

**KEYWORDS:** Entomology, Agro-learning website, E-learning, Chatbot, Expert

## I. INTRODUCTION

Reconpest is a quality informative website about pesticides. This is a best platform for Entomology, Agriculture students and for our Farmers to gain knowledge about various kinds of pests. Here, users can view the information about pesticides along with user can share their queries or suggestions or doubts in chat box / Query Box. To solve queries of users we have expert who is going to solve users queries and doubts. In these website expert plays very important role. Not only expert can solve queries/doubts of users, but other users also share their opinion to the user who have queries. ReconPest provides the required information in less time and helps on solving doubts by expert and other from users too. This website will enhance the spirit to learn more about pesticides by boosting their courage and hence will provide to all learners.

## II. LITERATURE SURVEY

After identification of problem, we moved ahead for some platforms that could provide us goog source of information and thus can be used in creating authenticated for our website. We researched using websites, apps, and books. The sources which were used are as follows:

- Effects Of Pesticides on Environment-  
Different types of pesticides have been used for crop protection. Pesticides are used to kill the pests and insects which attacks on crops and harm them.
- Pesticides Biochemistry and Physiology-  
The mode action of plant protection agents such as insecticides, fungicides, and similar compounds.
- Pesticides And Alternatives-  
The IPM Coalition under the umbrella of the ISEAL Alliance created "Pesticides & Alternatives". The multi-lingual tool will support pest control with less negative environmental and human impact. The APP is targeted for auditors, decision-makers of farms, fields, and forests. It provides:
  1. Access to toxicity information from government authorities, international agreements and/or academic institutions.
  2. The restriction status for major standard systems/labels for more than 700 pesticide active ingredients.
  3. All registered pesticides for a crop and pest species for Mexico and India, as well as per crop for Brazil, Kenya.
  4. Non-chemical pest control alternatives from CABI for 2700 pests and diseases. And access to PlantWise from CABI.

### III. METHODOLOGY

1. Home- As the website freely accessible to all learners without any type of hinderance, learners can directly visit our website without any process of proving their identity and the home page of the website is shown in figure 1.



Fig. 1 Home Page

2. Home Contents- Afterwards, learner can traverse within the information provided within the tabs or he/she can go through the informative modules provided below. After the attractive video view at start , we displayed another video below which gave basic information about pesticides, and it was accompanied by its description aside. With this we also provided a section where user can get recent updates about pesticides and thus can update his/her knowledge. These sections are shown in figure2.

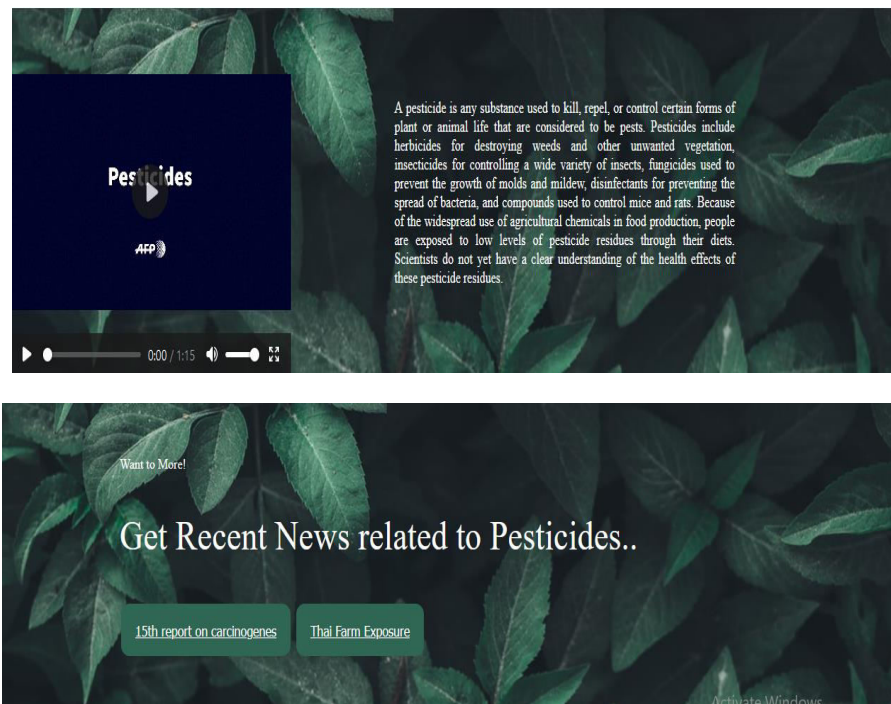


Fig. 2 Home Page Contents

3. Contact- On the contact tab, user can the options as per choice available like contact through email(to the team), contact through personal contact(with the team), through email or if they too want to part of our content creation, they can contact our Expert also.

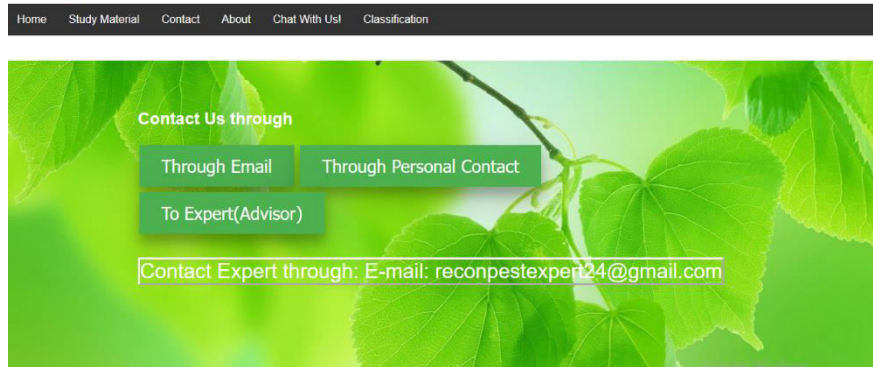


Fig. 3 Contact Page(1)

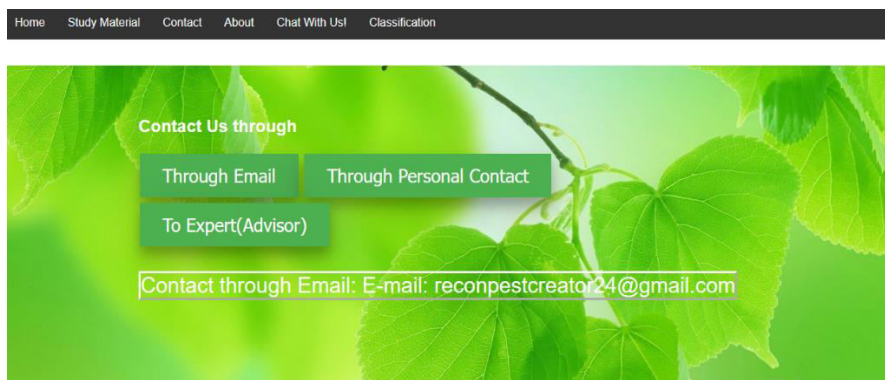


Fig. 3 Contact Page(2)

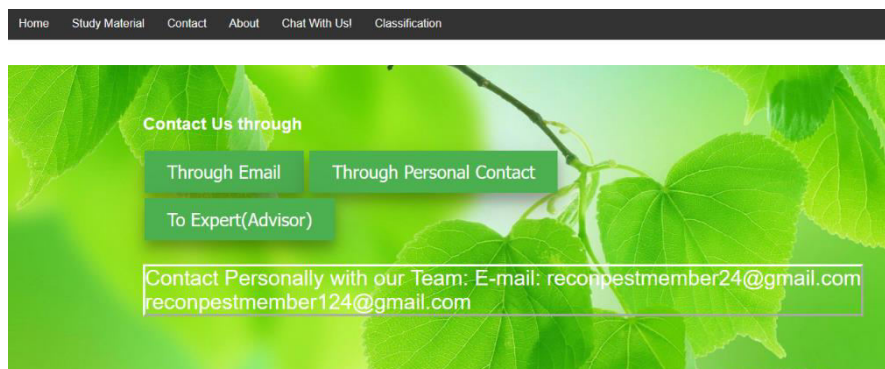


Fig. 3 Contact Page(3)

4. Study Material-On the study material tab you can get learning material related to pesticides in the form of pdfs and websites as shown in given figure 4.

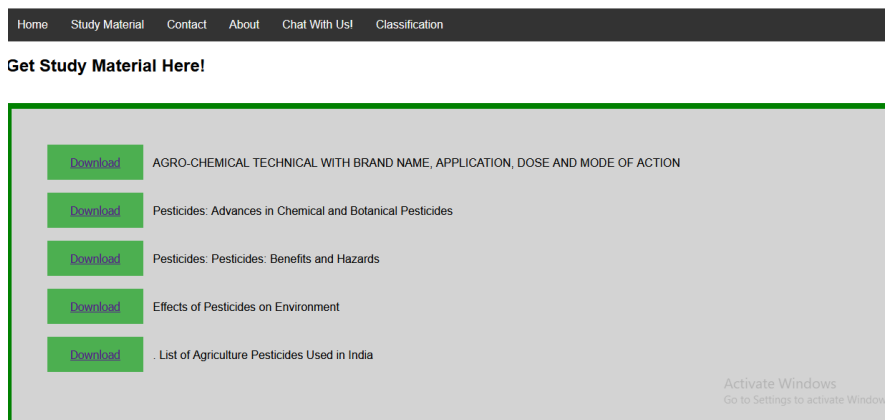


Fig. 4 Study Material

5. Chat with Us- Here we provided a chatbot where each user can post their queries and it will be answered in no time by the system. It is represented in figure 5.

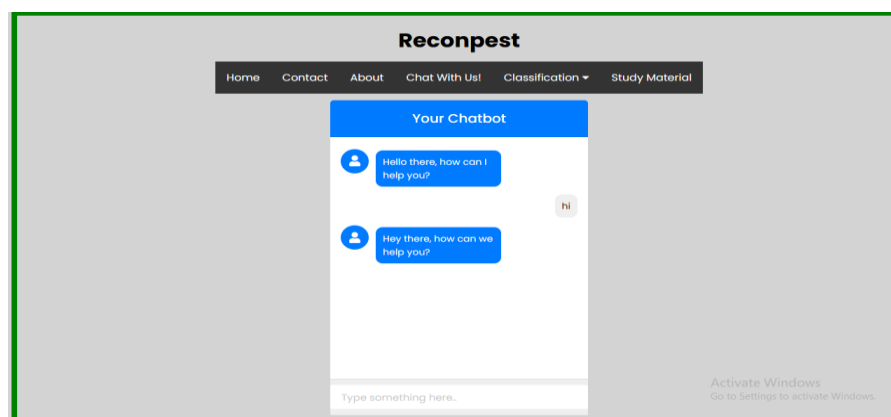


Fig. 5 Chatbot

6. Classification- classification tab contains information about petrification based on classification like mode of entry, chemical composition and pesticide function and pest organism they kill. Classification is shown in figure 6, figure 7 and figure 8.

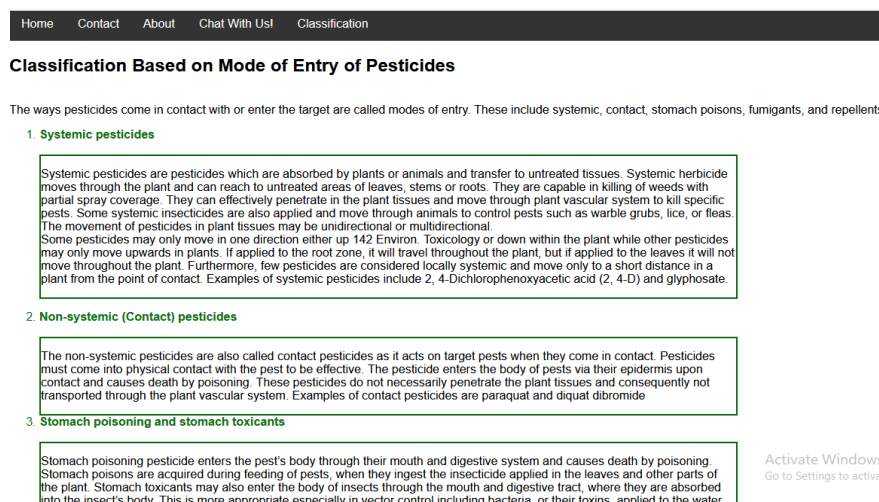


Figure 6. Classification based on mode of entry

Home Contact About Chat With Us! Classification

**Classification Based on Pesticide Function and Pest Organism They Kill**

Click on the buttons inside the tabbed menu:

Algae	<b>London</b>
Bacteria	<b>ALGAE</b>
Biopesticides	Algaecides are chemical compounds whose active ingredients kill algae and/or prevent it from growing in your pool. Among the available algaecides, there are ones that have copper ions as the active ingredient, containing copper sulfate or a chelated copper ion, and algaecides that contain quaternary ammonium compounds (referred to as <i>quats</i> ) or polymeric quaternary ammonium compounds (referred to as <i>poly-quats</i> ). Using each type of algaecide has pros and cons, with potential staining and foaming being the most common problem areas. Additionally, the operator must pair the correct algaecide with the correct algal type as algaecides are not universal. While the use of algaecides can be used to deter algae growth, the Sustain 3-Part System is so effective at keeping algae away that it comes with an algae-free limited warranty. Pesticides, including algaecides, must be applied according to the product label which is registered by the Environmental Protection Agency (EPA). Always wear the proper personal protective equipment (PPE) as stated in the manufacturer's label. Never deviate from the manufacturer's label directions. Consult with your Authorized Sustain dealer if you are uncertain about anything Sustain related and for help keeping your pool water balanced and algae-free.
Fungicides	<b>Application</b>
Herbicides	The application of an algaecide directly to the lake surface kills algae and prevents algal blooms from forming. PAKA® 27 is an algaecide that works through an oxidation process, releasing hydrogen peroxide into the water supply. This algaecide allows for selective treatment for cyanobacteria and is non-toxic to other forms of aquatic life. Other algaecides could also be considered that may be more effective for all types of algae, but potentially more toxic to other aquatic species after repeated usage over multiple years (e.g., copper sulfate). Algaecides may be used on an as-needed basis or as part of a treatment train with alum or other treatment methods. California has a statewide general NPDES permit for
Insecticides	

Figure 7. Classification based on pesticide function and pest organism they kill

### Pesticides

#### Classification Based on Chemical Composition

The most common and useful method of classifying pesticide is based on their chemical composition and nature of active ingredients. It is such kind of classification that gives the clue about the efficacy, physical and chemical properties of the respective pesticides. The information on chemical and physical characteristics of pesticides is very useful in determining the mode of application, precautions that need to be taken during application and the application rates. Based on chemical composition, pesticides are classified into four main groups namely; organochlorines, organophosphorus, carbamates and pyrethrin and pyrethroids [4]. The chemical based classification of pesticides is rather complex. In general, modern pesticides are organic chemicals. They include pesticides of both synthetic and plant origin. However, some inorganic compound is also used as pesticides. Insecticides are important pesticides that can be further classified into several sub-classes. The sub-classification of insecticides is given in Fig.

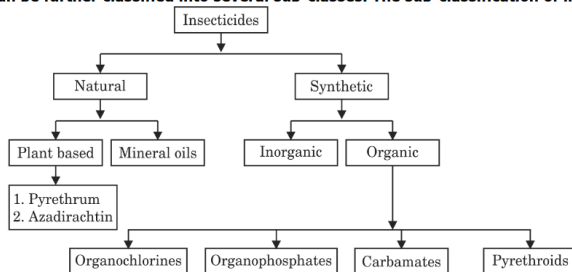


Figure 8. Classification based on chemical composition

### IV. SOFTWARE AND TECHNOLOGIES USED

The list of software's and technologies that we have used for our development purpose are:

- [1]. Visual Studio Code- Source-code editor.
- [2]. XAMPP- Local database used for storing data.
- [3]. 000WebHost- Free web hosting.
- [4]. Adobe Photoshop- Photo editing software.
- [5]. PHP (Hypertext Preprocessor)
- [5]. HTML5(Hypertext Markup Language).
- [5].CSS3(Cascading Style Sheets)
- [5]. MySQL.
- [5]. JavaScript

#### V. FEATURES

- [1]. Become an instructor
- [2]. Free to use.
- [3]. 24 x 7 available for users.
- [4]. Assistance –Assistance from expert in Entomology Agriculture.
- [5]. Digital platform

#### VI. CONCLUSION

We Successfully created the Website ReconPest, with the intention of providing hurdle free and authenticated knowledge to users,so that users can view the information about pesticides. Moreover, user can share their queries or suggestions or doubts in chat box / Query Box. To solve queries, we have expert who is going to solve users queries and doubts. Thus, this website helps users to get more detailed information about pests. This website provides the required information in less time and helps on solving doubts by expert and other users too.

#### VII. ACKNOWLEDGEMENT

It gives me immense pleasure to acknowledge the effort of each team member including our guide who helped and contributed their skills and knowledge to this project. To begin with, I express my gratitude to Mr. Pratik S. Chopade (Project Coordinator) for their guidance which helped in completion of our project. I would express my gratitude to Mrs. S. S. Gaikwad (Principal), Mr. Pratik S. Chopade (HOD Computer Department) and Mrs. Suman U. Puri(Mentor) who contributed towards the success of the project. With respect, I would also present my thanks to all staff and non-staff members who contributed and cooperated to our project.

#### REFERENCES

1. International Conference on Plant & Soil Science will be organized by Association for Scientific and Academic Research on 21 June 2022 in Kampala, Uganda. The theme of the conference is to provide an international platform to all the world developers, researchers to engage in scientific discussion about current research and the latest advancements in engineering and technology which facilitates the exchange of new ideas.
2. **Krishi Jagran-** Krishi Jagran hosted a webinar on "World Environment Day" on June 5, 2022, at 3:00 p.m. with the theme "Sustainable Ecosystem and Agriculture".Raising awareness about the balanced use of pesticides, fungicides, and fertilizer and Government's Initiatives Towards Sustainable Agriculture were among the key points in the webinar.
3. Learning PHP, My SQL, JavaScript & CSS: A step - by- step Guide to creating dynamic websites  
Author - Robin Nixon
4. HTML & CSS: Design and build websites, by Jon Duckett
5. Learn Web Design: A Beginner's Guide by Jennifer Niederst Robbins



INNO  SPACE  
SJIF Scientific Journal Impact Factor

Impact Factor: 8.165

 **doi**<sup>®</sup>  
**CROSS** **ref**

**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

 9940 572 462  6381 907 438  [ijircce@gmail.com](mailto:ijircce@gmail.com)



[www.ijircce.com](http://www.ijircce.com)

Scan to save the contact details