

Protect Cherry Blossoms from Aliens

1. Motivation behind Research Paper

Do you know how different kinds of alien species live in Japan? According to the Ministry of Agriculture, Forestry and Fisheries, there are more than 2000 kinds of them in Japan .How Much do you know about alien insect species? They are a type of insect which are a threat to both humans and nature. Lately, alien insect species are a serious problem all over the world. Therefore, my classmates and I were interested in studying about an alien insect species which lives in Nara prefecture and conducted research on the internet. Then, we found that “*Aromia bungii*” or the red-necked longhorn, is an alien species spreading their habitat not only in Nara prefecture but also all over Japan. This alien insect species kills cherry blossoms , Japan's national flower. This is a really serious problem for many people in Japan ,however most of them don't know about it.We want to stop the spreading of serious damage by this alien insect species , so I began the research of “*Aromia Bungii*”.



“*Aromia Bungii* “ · Body length is 2~4 cm

This insect is characterised by its red neck, shiny shell, and ability to spread rapidly.

2. Introduction

The purpose of our research is to prevent environmental damage from “*Aromia Bungii*” by raising awareness through presentations. *Aromia bungii* is an alien species which was confirmed in Japan in 2001. The insect was regarded as a “Specified Alien Species” which entered Japan during the Meiji period and creatures that cause or may cause damage to agriculture, forestry and fisheries, human life/body, or ecosystems. Specified Alien Species are prohibited from being imported, reared, transported, or released into the wild, and must be exterminated on the spot. It is native to China, Mongolia, Korea peninsula, Taiwan, and Vietnam. There is no evidence of how this species entered Japan, but this species may have entered Japan under the cover of luggage. The laying eggs season of *Aromia bungii* is from June to August and during one-time laying eggs these beetles spawn from 350 to 1000 eggs. The larvae often feed on cherry blossom trees. Once *Aromia bungii* lay eggs in one of these trees, then they grow and may lay eggs in neighbouring trees. Then, these trees will die in two or three years. There are a few special monitoring points of *Aromia bungii* in our city. Our research area is about 1.3 kilometres along the AKISHINO river with 154 cherry blossom trees. We have monitored the area three times. The data collected for this research will be taken from the “Ministry of the Environment “ and “Nara prefecture ”.

3. Results and Analysis

Actual state of investigation about “Aromia Bungii”.

On August 4, 2021, we observed how to deal with trees which were damaged by Aromia Bungii, which was confirmed at Kuhonji Temple in Gose City, Nara prefecture. There, the staff of the “Nara Prefecture Scenery and Nature Environment Department” gave a lecture on how to deal with it. The infested trees were covered with nets to prevent the infested trees from moving to other trees and the trees were injected with a chemical to kill the larvae of the insect. Dealing with infested trees takes a lot of time, and I felt that working under the scorching sun in midsummer was a tough job for elders. We also asked Mr. Miyake of the “Heijo Palace Support Network Midori Preservation Department” measures and initiatives that he is taking at the Heijo Palace. In Nara City, Nara Prefecture, four locations have been registered as important monitoring points for the Aromia bungii.

Investigation of row cherry blossoms in Akishino River

We conducted a survey along the cherry blossom trees along the Akishino River near our school with members of “Association for Love and Raise the Headwaters of the Akishino River”. The distance of the cherry blossom trees along the river is about 1.3 kilometres, and there were a total of 154 cherry blossom trees. The survey which is checking cherry blossom trees which are healthy or unhealthy.

[Result of the survey]

	Healthy trees	Unhealthy trees	Healthy with Japanese Assassin Bug	Unhealthy with Japanese Assassin Bug
October 2021	144	10	2	8
November 2021	139	15	4	10
July 2022	77	77	0	1

Presentation at “The Japanese Forest Society”.

We participated in the “9th High School Student Poster Presentation” organised by “The Japanese Forestry Society”. At that time, it was out of the active period of *Aromia Bungii*, so I was searching for a way to coexist with it, not just to get rid of it. However, we could not come up with a good idea, so we tried to get opinions from experts and university professors. As a result, we received many opinions and questions, learned many ways of thinking, and broadened my perspective. We realised again that our ideal — people coexisting with alien species — is difficult for them to do. Therefore we thought that it is an important issue to be considered by us.

4. Conclusion and Future Problems

If we find the *Aromia bungii*, we will kill them on the spot without letting them escape and report it to the Natural Environment Division. However, simply exterminating the *Aromia bungii* which has invaded Japan is a temporary measure and has not yet solved the fundamental problem. So we turned our attention to something more fundamental. By communicating and understanding the “serious damage caused by alien species” such as the *Aromia bungii* and the “current situation that many alien species are taking the lives of alien species”. It is becoming a trend to never bring alien species into Japan. Therefore, we thought that it would be important to tell many people about this serious situation and let them know about it.

5. Reflection

During about a year and a half of my research, I have learned and thought about many things. Before starting research, I had a vague understanding of alien species. I also believed that they should be exterminated if they were harmful to humans or the environment. Through my research, I learned about the existence of foreign organisms called "specified alien organisms" that are targeted for extermination. I learned that many alien species are being exterminated. But, I felt that it was too unreasonable that Alien species were brought in by people, so I put myself in an alien species' place to be exterminated. Similarly, there are countless lives that are managed so that humans can live a comfortable life, such as livestock and pets. I thought it was so important for humans to live their lives with gratitude for the fact that we are made up of the lives of many living things.

Work Cited

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