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BIOLOGICAL FEATURE AND PATHOGENIC SIGNIFICANCE OF THE MALARIA FLY

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ABSTRACT: The article will talk about the biological characteristics of the malaria fly, the development cycle, the pathogenic significance of insects and their impact on human health.

KEYWORDS: Biology, mosquito, parasite, organism, disease, sporozoid, schizont disaster, insect, animal.

INTRODUCTION

Pests insects and various diseases caused by them are considered a huge disaster on Earth, which negatively affects human life, in addition to the loss of a very large part of the crop during the development of agricultural plants and during the storage of products. Some years of harmful organisms not only killed 60-80% of the crop, but also caused the mass emergence of various dangerous infectious diseases in plants, animals and humans.

Likewise, one of the parasitic insects that pose a great threat to human life is the Plasmodium, which belongs to the Anafelis family. Perhaps you are surprised that the most dangerous insect in the world is this dwarf creature — a mosquito. Yes, the mosquito causes millions of people to build a pillow. There are some types of mosquitoes that cause malaria to spread. There are more than 2,000 species of mosquitoes in the world. Their structure is very complex, and scientists are day after day discovering information about it.

There are 9 types of mosquitoes in Uzbekistan. Of These, A. maculipenis is the most common. With human blood, only the female of these flies feeds. They attack people in the evening and at night. Together with the digestion of blood, eggs develop in the female fly. How quickly this process goes depends on the temperature of the external environment[2].

The most convenient place for laying eggs is a source of water with good sunlight, stagnant, surrounded by plants. Female mosquitoes lay up to 100-2500 eggs in 1 time. The larvae feed on substances that remain suspended on the surface floor of the water. Therefore, in order to eliminate the larvae, toxic substances are sprayed on the surface layer of water. The hummingbird

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does not eat. The cuticle behind it is perfected and the fly made from it is separated. These processes in water occur at a temperature of +100 C and +35°C. At + 16-19°C, this process takes 30 days, at +20 – 22°C – 18 days, at +24-270 C-14 days. Flies are usually thrown at a person in the evening. The Anopheles mosquito, together with the absorption of blood by a healthy person when bitten, infects sporozoites into the human body, and a period of asexual development (schizogony) begins in the human body.
The length of the sporozoite is 5-8 μm, the single-core is worm-shaped and mobile. They initially enter and round the cells of organs such as the liver, spleen, and form 16-12 single-core merozoites in the asexual schizogony method, copious (about 48 hours after infection)[1].

The merozoites formed break down the affected cell and penetrate one into the new cells and repeat the schizogony process again. As a result, parasites multiply rapidly in tissue cells, part of which merozoites enter the erythrocytes in the blood fluid and turn into schizont.

The schizont is initially small annular and later it forms pseudopodians, similar to Amoeba. Electron microscope investigations have shown that schizont (like the merozoites of coccidia) would be an ultracitostoma. Schizont feeds on hemoglobin inside erythrocyte. Undigested products turn into granular black pigment-melanin. After the schizont grows and completely occupies the inside of the erythrocyte, it is divided by schizogony, forming 10 to 20 new merozoites. These merozoites erode the damaged erythrocyte and exit into the blood plasma. Thus, the penetration of merozoite into erythrocyte, the transformation into schizont and the formation of new merozoites from it, the period of exit to the blood plasma or a full one-link asexual (schizogony) reproduction period will be equal to 48 hours. The three-day malaria disease huruji in a person also recurs after 48 hours[3].

This parasite, after feeding on substances inside the cell and eating what is in it, causes the cell to enlarge and break down. The parasite spreads through the blood. During the spread, many parasites enter the red blood cells, eating its cell, multiply there, and then come out of it when the cell breaks down.

It is during this decay that a person begins to show symptoms of the disease. In this case, the body temperature rises, involuntary tremors in the muscles, enlargement of the liver and anemia occur. But the parasites do not stop at their work, breaking down the patient's cells one by one, eventually reaching the brain, and paralysis is observed in the patient.

This state is the beginning of destruction. Blood remains unable to supply oxygen to the body. The lungs work poorly from lack of oxygen. the heart does not have the strength to throw blood. Brain cells also begin to disintegrate, and the result ends in death. Most often, the patient goes into a state of coma in the last stages of the disease, and this state ends in death. Plasmodium is able to protect itself from antibiotics. That is, no vaccine against this Plasmodium has yet been

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found. About a million people die every year due to malaria. Many of these are children who live on the African continent.

In 2018, 228 million people worldwide suffered from malaria. In the same year, about 405 thousand people died from this disease. Children under 5 years old are prone to malaria, and in 2018 they accounted for 67% of those who died from malaria around the world. The number of children who died was 272 thousand. In 2018, the amount spent on controlling and eliminating malaria reached $ 2.7 billion. The malaria mosquito reproduces in water bodies that occur temporarily as a result of the failure of river banks, a waterlogged body of water, waterfalls, garbage waste overflowing, stagnant water or slow streams, water pipes[4.,5].
In place of the conclusion, we must say that even in today's society it is impossible to cope and cope with this disease. Therefore, the Prevention of the disease is the most important - insect bites are necessary to protect themselves. Currently, the biological and chemical fight against pests and diseases is widely used. The chemical method in the fight against pest insects and other chokeberry is widely used in world experience.

REFERENCES

1. Mevlanov O., Saparov K., Toshmanov N. Zoology (invertebrate animals) textbook. Sano - standard publishing house. Tashkent-2018
2. 2.Nosimjon Hoshimjon Article (information from the internet)
3. 3. ResDSENM Department of Parasitology entomology X.Prepared on the basis of the article aitmuratova (information from the internet)
4. . http://library.ziyoneat.uz/ru/book/
5. 5. https://uz.wikipedia.org/wiki/