



## MONITORING THE SPREAD OF WOOD PESTS IN CULTURAL MONUMENTS AND RESIDENTIAL FACILITIES IN THE SURKHANDARYA REGION

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**Abstract:** In this article, the spread of the Turkestan termite in the regions of Surkhandarya region is researched, and the areas where the Turkestan termite is spread, termite damage and measures to fight against termites are discussed.

**Keywords:** Turkestan termite, northern regions, Anacanthotermes (Jacobs, 1904), historical and cultural monuments.

The southern regions of Uzbekistan are hotter than other regions, in these climatic regions termites belonging to the Anacanthotermes (Jacobs, 1904) genus of serious pests are widespread as the dominant species, covering everything with mud and plaster, creating diverse environmental conditions. they live in communities, mainly in relation to the soil. Especially today, the increase in the number of termites in the natural conditions of Surkhandarya is causing serious damage to the construction of plants in the wild forest ecosystem adapted for the area, to all objects and structures created by human hands. From this point of view, pest characteristics of termites in natural conditions and places of anthropogenic transformation, monitoring of their spread, seasonal adaptation of the pest to the area, diversity of nutritional units, levels of damage to people's houses, social, cultural-heritage, strategic objects clarifying, as well as ensuring the construction of pest-resistant buildings and the implementation of improved preventive control measures against them are important issues [1].

The Turkestan termite-infested areas, which are the object of our research, were determined by the mashrut method. Using this method, a certain direction was determined, and the degree of spread of termites in that direction was determined. In general, through our research, we got acquainted with the way of life of termites and found answers to several questions. In the territory of our region, including in the Northern districts, 1 type of termites, the Turkestan termite, is widespread, and in the following years it causes great damage to the houses of the population and the buildings of the public economy.

Taking into account the biological development and harmful properties of termites belonging to the genus Anacanthotermes in the anthropogenically transformed areas of Surkhandarya, monitoring of their distribution was studied. In this case, when comparative monitoring of households, cultural heritage, socio-economic objects and field land areas affected by Anacanthotermes termites in the Surkhandarya region for the years 2020-2023

was studied, it was found that mainly in anthropogenically transformed areas, the houses of the population, field land areas (cemeteries) many termite encounters were observed.

In addition, it was found that the dominant pest termite is found in the historical and cultural monuments of Kampirtepa Castle, Kyrgyz Castle, Fayyoztepa Buddhist Temple located in Mohammad Hakim Termizi neighborhood of Termiz District, Karatepa Buddha Cave Temple and other monuments. Cellulose-containing materials used in the reconstruction of these monuments were damaged by termites. The straw and wooden logs and boards used for the walls of the monuments were well eaten by termites.

Currently, termite migration is observed in the northern regions of Surkhandarya region, causing great damage to people's houses, agricultural buildings and even historical monuments. Termites Denov district (Kiziljar), Shurchi district, Boysun district (Shorob village, Otkamarsoy, Pudina neighborhood), Kumkorgon district (Navruz neighborhood, Azlarsoy, Kattakol neighborhood) Sariosiyo (Shargun, Emso) ) regions, in the village of Shorob, Boysun district, the distribution of termites was observed in residential areas located at an altitude of 1400-1500 above sea level.

table

District and city	Number of regions	Total number of damaged buildings	Total termite infested area /h	Percentage of damage to total area
Termiz	7	436	65,4	15,7
Sariosiyo	1	121	18,1	10,9
Boysun	5	102	15,3	3,7
Denov	2	7	1,1	1,3
Kumkorgon	4	33	5	3,0
Angor	8	254	38,1	5,7
Oltinsoy	5	450	67,5	10
Uzun	1	12	20	17,3
Shurchi	1	4	7,2	4,3
<b>total</b>	<b>33</b>	<b>2991</b>	<b>448,7</b>	<b>8,2</b>

One of the most important biological problems in the development of integrated control measures against termites is the study of their food specialization. It is a modern and effective direction to choose the food that the pest likes the most, prepare different foods based on this food, and use it as a control measure. Because the termites live in a hidden state, the recommended preparations do not reach the termite nests completely, and the remaining termites in the nest restore their number, the ineffectiveness of traditional control measures is confirmed by the subsequent researches of world scientists [2]. Therefore, it is noted that only two ways of combating termites are promising.

- use of pathogenic and toxic feed in the fight against termites;
- obtaining termite-proof construction and other materials.[3]

The reason for such a high rate of damage by termites is the destruction of the areas where they live, the use of damaged object materials in the reconstruction, the fact that the population does not have complete information about this pest, even when measures against them are taken in the short term is considered to quickly restore its population.

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