

Original article

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## Bark Beetle Monitoring Using Pheromone Traps in Moscow region in 2022–2023

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**Abstract.** Bark beetle monitoring *Ips typographus* (L.) (Coleoptera, Curculionidae) results in a stationary plot in Moscow region are presented. On average per a trap 3254 beetles were registered over 2022 season. It is sufficiently higher (5.7 times) than in 2021 (569 beetles). 1<sup>st</sup> generation bark beetle threshold rise in 1500 beetles per trap was registered. Bark beetle 2<sup>nd</sup> and sister generations occurred as well. Favourable weather in 2021–2022 vegetation period promoted bark beetle population growth. Air temperature in May–August 2021 was the highest since 2014.

On the contrary in 2023 bark beetle population sufficiently decreased (3.5 times) on average 932 beetles were caught over the season. This year in May–August precipitation rate was 101.5 mm higher and air temperature lower than in 2022. Bark beetle micro outbreak availability and distance also affected number of caught beetles.

**Key words:** bar beetle, population monitoring, pheromone traps, beetle swarming dynamics, hydrothermal conditions.

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