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TROPILAELAPSOSIS. A NEW THREAT TO EUROPEAN APICULTURE

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Tropilaelaps mercedesae poses an emerging threat to European apiculture. Originally native to Asia, these mites are now advancing westward, with documented occurrences in Central Asia, southwestern Russia, and Georgia, indicating a continuous overland movement toward Europe. This westward spread is alarming for the continent, particularly due to the proximity of infested regions and the elevated risk associated with intensive beekeeping, illegal trade, and climate change, which may facilitate the geographic migration of the mites. Milder winters and extended brood-rearing periods resulting from climate change further increase the likelihood of their establishment in temperate regions, such as the Western Balkans and the Mediterranean. Given the mites' rapid reproductive cycle and the severe parasitic impacts they cause, their establishment in new areas could lead to significant colony collapse rates and economic losses, potentially exceeding those caused by Varroa, However, the mites' life cycle, which strongly depends on the presence of honey bee brood, presents a promising opportunity for developing chemical-free control strategies, particularly through methods aimed at interrupting brood rearing. Effective management of this emerging threat will require enhanced surveillance, improved detection protocols, stricter border controls, rapid response strategies, and research into integrated control methods. Proactive preparation is vital to protect European apiculture from the threats posed by Tropilaelaps, especially given the high risk of introduction.