

Discovery of the Invasive Argentine ant, *Linepithema humile* (Mayr) (Hymenoptera: Formicidae: Dolichoderinae) in Korea

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한국에서 *Linepithema humile* (벌목, 개미과)의 발견보고

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ABSTRACT: The invasive Argentinian ant, *Linepithema humile* (Mayr, 1868) (Hymenoptera: Formicidae: Dolichoderinae) was discovered in Korea. Diagnostic characteristics, distribution range, and potential as a pest are discussed.

Key words: Hymenoptera, Formicidae, Dolichoderinae, *Linepithema humile*, Korea

초록: 벌목 개미과 시베리아개미아과(Hymenoptera: Formicidae: Dolichoderinae)의 *Linepithema humile* (Mayr, 1868) (신칭 민개미)가 국내에서 처음 발견되었다. 진단학적 형질, 분포 범위, 해충으로서의 잠재적 가능성에 대하여 논의되었다.

검색어: 벌목, 개미과, 시베리아개미아과, *Linepithema humile*, 한국

The Argentine ant, *Linepithema humile*, which is one of the quarantine pests in Korea, was discovered by forest insect pests team of Sangji University in Busan on 13th-August 2019 and Kwangyang (Jeonnam province) on 22th-December 2019. The ants were found on the surface of the container yard's wall at Busan station and the cracks on the container yard wall, which was covered with ascon, in Kwangyang. After collection of ant specimens, they were identified as *Linepithema humile* by the corresponding author on the next day.

This ant is nondescript, soft-bodied, small (body length 2.2–

2.6 mm), blurry light to darkish brown in color, and has large compound eyes. The species is native to the Paraná River drainage basin in the South American continent, which stretches across southern Brazil, Paraguay, Uruguay, and northern Argentina (Wild, 2004). *Linepithema humile* grows in Mediterranean climates, and over the past century it has been spread widely by human-mediated transport to Chile, North America, Hawaii, New Zealand, Easter Island, Australia, Japan, Africa, and Europe (Wetterer et al., 2009). Invasive Argentine ants are important pests, causing serious harm to native natural ecosystems (Cole



Figs. 1-3. Worker of *Linepithema humile* (Mayr). 1, Frontal aspect; 2, Lateral aspect; 3, Dorsal aspect.

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Received February 4 2020; Revised February 12 2020

Accepted February 20 2020

et al., 1992), including vertebrate (Suarez and Case, 2002), and plant communities (Christian, 2001). These ants are also major agricultural (Vega and Rust, 2001) and urban/residential (Klotz et al., 2008) pests. Insects account for 14 of the world's 100 worst invasive alien species (Lowe et al., 2000). Among these invasive insects, there are five species of ants, most of which are pests that cause enormous damage. It is therefore necessary that the Korean Government pays more attention to, not only the red imported fire ants (*Solenopsis invicta* Buren) but also the other four species (*Anoplolepis gracilipes* (Smith), *Linepithema humile* (Mayr), *Pheidole megacephala* (Fabricius), and *Wasmannia auropunctata* (Roger)).

Acknowledgements

This work was supported by a grant from the National Institute of Ecology (NIE), funded by the Ministry of Environment (MOE) of the Republic of Korea (NIE-D-2019-32).

저자 직책 & 역할

류동표 : 상지대, 교수; 실험설계 현미경 분석 및 논문작성
 이흥식 : 농림축산검역본부, 농업연구원; 외래침입종 위험
 평가/검역 및 방제 담당
 김동연 : 국립생태원, 선임연구원, 침입외래종 연구 및 생태
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모든 저자는 원고를 읽고 투고에 동의하였음

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