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[International Cooperation] Researchers from Taiwan, United States and Australia Show Fire Ants Using United States as Springboard for Invading Asia, Australia – Findings Published in 《Nature》

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[International Cooperation] Researchers from Taiwan, United States and Australia Show Fire Ants Using United States as Springboard for Invading Asia, Australia – Findings Published in 《Nature》 (Chinese Version)

CNA & Awakening News Networks The aggressive, stinging ants arrived from South America and got a foothold in the United States in the 1930s, gradually spreading across the South. Now, an international research group consisting of members from the United States, Australia and Taiwan finds that the United States has become the springboard in the last 20 years for the ants to invade such distant locations as China, Taiwan, Australia and New Zealand. Besides, the team has also constructed a complete genetic database, with which the origin of the invading ants could be easily determined. The achievement greatly enhances the global control of fire ants problem. The international team is sponsored by US Department of Agriculture (USDA), Taiwan Council of Agriculture (COA) and National Science Council (NSC). The findings are published in Nature on February 25.

Earlier in this year, the research team completed the genetic database of the invading ants. The team collected 2144 communities of fire ants from 75 invaded areas in the globe and utilized genetic tests and measures to determine the origins of these communities. According to the analysis of the genetic marks recorded, almost all the invasions are independent events and can be traced back to the communities in the United States, rewriting the long-term impression that South America be the major origin of invading fire ants.

The Latin scientific name of fire ants is "invicta," meaning "invincible." It is very difficult to wipe out their communities once invaded, and the spreading control is the best measure we can take. In the past, we did not fully understand the spreading pathways so the control became very difficult and noneffective. Now, the findings of the group offer a clear map of the spreading model and a complete global genetic database. It will be easier for us to know the origin area of the invading ants and the spreading pathways, and consequently the spreading control will become more effective.

Further Information:

<u>CNA 2011/02/25</u> (Chinese)

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<u>Awakening News Networks 2011/02/25</u> (Chinese)

<u>National Science Council International Cooperation Sci-Tech Newsbrief</u>

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