

Poster Presentation

[PS02] ポスター発表(学生 B:コアタイム2)

Sat. Mar 30, 2024 12:30 PM - 1:30 PM Sakura (Student) (Sakura)

[PS02-78] Comparison of area-wide population structure between

Oriusstrigicollis and *O. sauteri*

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The genus *Orius* is crucial in agricultural biological pest control. Among them while *O. strigicollis* is confined to Japan's western coastal areas due to winter coldness, *O. sauteri* exhibits broader distribution potential. Limited research on their genetics and population structure hinders their utilization in biological control. This study aims to compare regional population structures of these two species.

This study assessed *Orius* population structure in central Japan. Samples collected were species-identified with multiplex PCR. Eight microsatellite markers facilitated genotyping and analysis. Among 494 individuals across eight populations, species identification revealed 6 *O. minutus*, 218 *O. strigicollis*, 246 *O. sauteri*, and 5 *O. nagaii*. *Orius strigicollis* displayed a positive correlation between geographic distance and pairwise- F_{ST} , suggesting limited gene flow due to isolation or environmental variation. In *O. sauteri*, no significant correlation existed, likely due to high gene flow and extensive distribution.