

**Genetic Relationships of *Sitobion akebiae* (Shinji)
(Sternorrhyncha; Aphidinae) in Korea with World
Sitobion species on Gramineae**

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Sitobion akebiae (Shinji) is an aphid that is recorded only from Korea and Japan on grasses. It is very distinctive to have several primary hosts, *Akebia*, *Rubus*, and *Stellaria*, whereas most other *Sitobion* species on Gramineae are monoecious anholocycle. However, those species are known as quite similar in morphology. The morphological variation of *Sitobion* specimens in Korea is very wide, so that it cannot be distinguished from other two species, *S. avenae* (F.) and *S. miscanthi* (Takahashi).

Not only this overlapping ranges of the quantitative characters in the three species, but also a genetic markers, tRNA^{Leu} mt COII among some populations of each species are very close or even identical. They are distinguished from *S. fragariae* (Walker), which are known on grasses and *Rubus* species, by both morphological and molecular characters.

The identities of the three species, *S. akebiae*, *S. avenae* and *S. miscanthi* are being arisen in question with the morphological and genetic relatedness, so that the synonymizations of them are being proposed.