

Fig. S1. Chromatogram of NMN standard (SRM transition at m/z 335.1 to m/z 123.0) at different concentrations (a-e).



Fig. S2. Chromatograms of NMN (SRM transition at *m/z* 335.1 to *m/z* 123.0) obtained from different types of insect species (a-b) (*S. lateralis,* and *G. bimaculatus*). The numbers (1)~
(3) indicate the replications of the insect samples.



**Fig. S3.** Chromatograms of NMN (SRM transition at m/z 335.1 to m/z 123.0) obtained from different types of insect species (c-d) (*H. sjostedti*, and *H. illucens*). The numbers (1)~(3) indicate the replications of the insect samples.



**Fig. S4.** Chromatograms of NMN (SRM transition at m/z 335.1 to m/z 123.0) obtained from different types of insect species (e-f) (*R. speratus*, and *Z. atratus*). The numbers (1)~(3) indicate the replications of the insect samples.



**Fig. S5.** Distribution of NMN in the whole body of *S. lateralis* by DESI-Q-TOF. Representative DESI-IMS ion images for NMN at m/z 335.1 [M+H]<sup>+</sup> in NMN standard, *S. lateralis* section (a), and m/z 357.1 [M+Na]<sup>+</sup> in NMN standard, *S. lateralis* section (b).