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# *Halyomorpha halys* fruit damage shifts but does not reduce when aggregation pheromone is used in apple orchards

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*Halyomorpha halys* (Hemiptera: Pentatomidae) is an invasive pest that inflicts significant damage to several crops. Our study examined the effects of placing "mini-sailboat" traps (MSB), a novel kind of aggregation pheromone-baited trap for *H. halys*, along the boundary of apple orchards. The spatial distribution of fruit damage was then assessed. The MSB trap has a sizable trapping surface, a visually appealing cue, and a huge sticky black sail with a water bin. 16 MSB traps were positioned along the boundaries of two apple orchard clusters extending for 1.3 kilometres. A visual evaluation of fruit damage was carried out at 107 points, progressively farther out from the orchard boundary. For every point, the incidence and severity of fruit damage were computed. According to our findings, placing MSB traps along the edge of the orchard significantly increased the fruit damage incidence for the first 45 metres from the trap; further away, the damage incidence decreased in comparison to the orchard without traps. There was a 50% cumulative damage incidence reduction from 85 m to 26 m from the traps. Our findings demonstrate the possible effectiveness of MSB traps in controlling the infestation of *H. halys* by limiting its damage in a border strip close to the traps. According to this study, using MSB traps could allow the application of insecticides more precisely, resulting in more successful pest management techniques.