

## EFFICIENT VECTOR CONTROL USING PYRIPROXYFEN WATER FIZZY FORMULATIONS

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Larviciding is an effective and practical method for controlling vectors. However, it requires extensive manpower and frequent treatment of larval habitat. Recently social demands have been growing for laboursaving, compact formulations and improved safety at the time of application and usage.

In such situations, the authors investigated the possibility of a new control method using water fizzy formulations such as water fizzy tablet (WFT) and water fizzy granule (WFG), containing pyriproxyfen which has a high juvenile hormone activity against mosquitoes.

When WFT and WFG containing 5% of pyriproxyfen, were applied to the centre of the pools (area: 456 m<sup>2</sup>; depth: 0.15 m) pyriproxyfen was almost uniformly diffused in both pools at 7 hours after application. Adult emergence of *Culex pipiens pallens* in the water collected from the pools at 7 hours after application was completely inhibited. The excellent diffusion of active ingredient was due to the driving force of carbon dioxide gas.

In conclusion, WFT and WFG are promising for efficient vector control as a laboursaving method, e.g. spot application from the shore of a lake, pond or swamp. Such applications to the breeding sites of vectors should involve reduced operator exposure.