

2017 Water testing results following aerial treatments of Tebufenozide

In 2017 forested areas in northern New Brunswick were sprayed with one application of tebufenozide to control a growing spruce budworm population in that area. Tebufenozide is a synthetic insect growth regulator that was developed to control caterpillar pests in agriculture and forestry. Tebufenozide is being used in the early intervention research to control spruce budworm populations.

In response to concerns about water quality by municipalities in New Brunswick, a water monitoring project was initiated by the Healthy Forest Partnership to determine the impact to water quality caused by spraying of tebufenozide on foliage within watersheds. Samples were taken 2 days and 2 weeks after the spraying of tebufenozide. Water samples were collected from two sites in the Miramichi River. The toxicity of tebufenozide is measured in milligrams (mg) per liter (L) of water. Results from laboratory analyses of water samples show that no tebufenozide was detected in watercourses at any of these monitoring times.

Many studies have been conducted to determine the effect of tebufenozide on aquatic organisms. These studies found that tebufenozide is not harmful to fish and most stream-dwelling organisms. The spraying of tebufenozide over open bodies of water (including ponds and streams) is not permitted. Studies have shown that most of the spray from aerial applications is intercepted by foliage and does not reach the ground. The small amount of spray that reaches the ground binds to organic matter and is later broken down.

If you would like a copy of the water report, please contact the Healthy Forest Partnership via the website (healthyforestpartnership.ca) or telephone (1-844-216-3040).

Site Name	+2day (mg/L)	+2week (mg/L)
Miramichi North	0	0
Miramichi South	0	0

Dr. Rob Johns and Emily Owens
Healthy Forest Partnership