

An orchard having a low environmental impact at Parc national du Mont-Saint-Bruno

By Daniel Cormier and Gérald Chouinard, Researchers-Entomologists, Integrated fruit production laboratory of the Institut de recherche et de développement en agroenvironnement (IRDA)

The Société des établissements de plein du Québec (Sépaq) entered into a partnership agreement with the Institut de recherche et de développement en agroenvironnement (IRDA) concerning the environmental management of the orchard of Parc national du Mont-Saint-Bruno. Since April 1, 2003, the agreement has authorized the IRDA to operate the orchard with a view to carrying out research and development (R&D) as well as growing and marketing apples. The park's recreational-tourism vocation has thus been complemented by an environmental and scientific vocation. Following redevelopment and rejuvenation work, the orchard was divided into three sectors, each having a distinct vocation: the R&D sector, the demonstration sector, and the conservation sector.

Having a surface area of 2.5 ha, the R&D sector is devoted to various types of research seeking to develop tools and strategies for managing pests in an environmentally friendly way. The aim of the research is notably to reduce the drift and environmental impact of pesticides, a better use of pesticides, the development of alternatives to pesticides, including biological control, the preservation of beneficial insects, and the detection of pests. All of these studies seek to reduce the environmental impacts while preserving the quality and profitability of production operations. The R&D sector also includes a plot that is not treated with pesticides (except for herbicides), where the biology and seasonal ecology of several pests and their natural enemies are studied.

As for the integrated fruit production (IFP) demonstration sector, it occupies 2 ha and aims to make known to apple-growing professionals, producers and the public new environmental methods associated with integrated fruit production, an approach where the emphasis is placed on a minimal use of pesticides and the adoption of integrated management. With this approach, it is possible to produce quality apples in a profitable and environmentally friendly manner.

The conservation sector, which spans an area of 2 ha, is dedicated to preserving the historical, varietal, cultural and scientific heritage of this orchard established in 1929 by the Frères de Saint-Gabriel. Old but ever-popular cultivars (Cortland, Lobo, Melba, McIntosh) are found next to less well-known cultivars (Bancroft, Hume, Wealthy) along with a few pear trees and plum trees. Finally, to the great pleasure of visitors, the orchard of Parc national du Mont-Saint-Bruno is open throughout the fall, allowing visitors to pick the various varieties of apples.