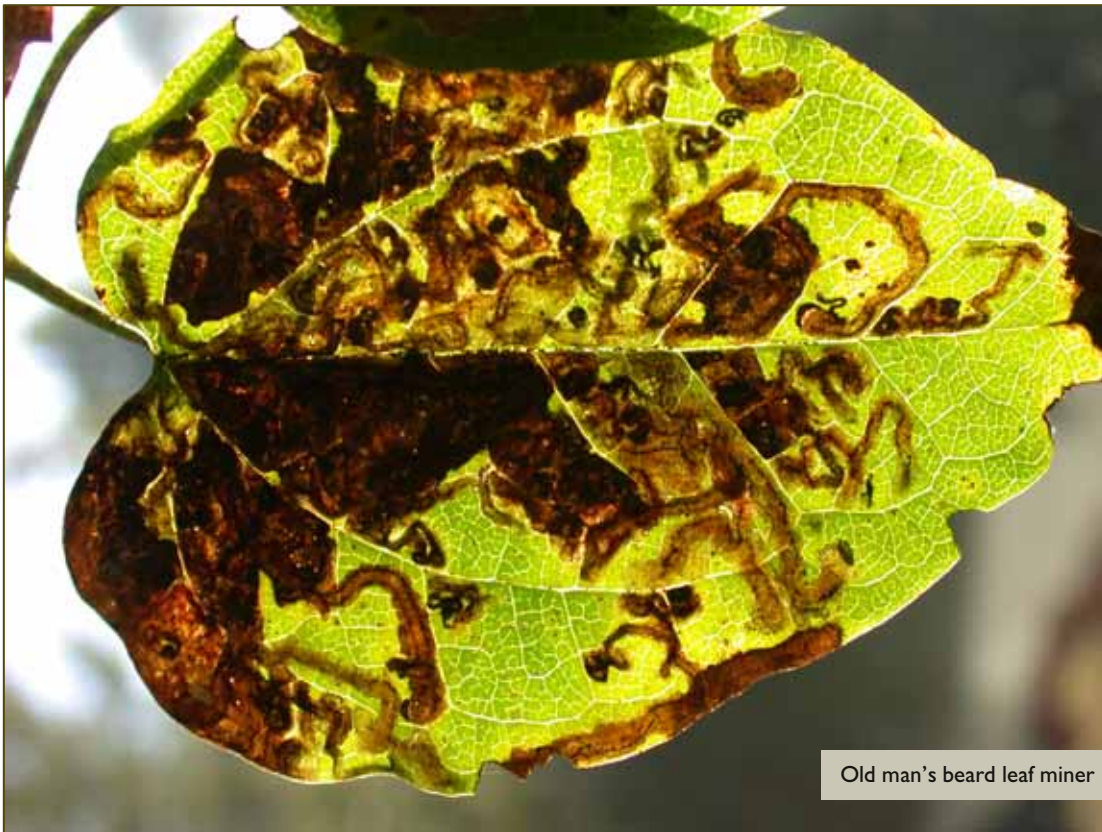


OLD MAN'S BEARD

Clematis vitalba
Ranunculaceae



Old man's beard leaf miner

Three biological control agents have been released against old man's beard: old man's beard leaf fungus (*Phoma clematidina*), old man's beard leaf miner (*Phytomyza vitalbae*), and old man's beard saw fly (*Monophadnus spinolae*). All three agents attack the foliage, and the fungus also damages the stems. Only the leaf miner has established and is common and widespread. The fungus had some impact early on but may have since died out. No sign of the sawfly has ever been seen and it seems unlikely that it has survived. A fourth agent, a bark beetle (*Xylocleptes bispinus*), is currently being investigated.

