Acer rufinerve Siebold & Zucc., a new invasive tree in Belgium ?

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The red veined maple, *Acer rufinerve*, is a tree native to Japan described as an early successional species of temperate forests. It is characterised by a very short generation time, high survival and growth rates and a strong ability of resprouting after cutting. Although it has been introduced as an ornamental in gardens and public green areas of many countries, invasion histories were never reported so far in the scientific literature. A. rufinerve has been recently reported to invade the understorey of a forest of 300 ha near the city of Mons, where a few individuals were planted in 1950-1970. We conducted a systematic inventory of this forest based on a 50 m x 50 m sampling grid to map plant distribution at local scale and document the invasion. Results show that this species thrives on podzolic soils (pH 4) and prefers moist stands dominated by oaks. It is often found together with *Prunus serotina*, another invasive tree species. Both of them avoid dense canopies dominated by beech trees. Today, the population is made of a few large trees surrounded by a large number of seedlings and young stems. Seeds may be dispersed over distances of 500 meters. Forest colonisation is rather efficient as more than 50 ha were colonised during the last 10 years. Young stems form very dense thickets wherein few herbaceous plant species are able to grow except bramble, Rubus fruticosus. Red veined maple development is therefore likely to reduce plant diversity. A rapid eradication of A. rufinerve is strongly recommended. Control techniques are currently tested to determine best practices to reach that goal.

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