

Feedback from Experiments on Managing Methods against Japanese Knotweed on a River Appendix of the Rhône between 2015 and 2020

Authors : William Brasier, Nicolas Rabin, Celeste Joly

Abstract : Japanese knotweed (*Fallopia japonica*) is very present on the banks of the Rhone, colonizing more and more areas along the river. The Compagnie Nationale du Rhone (C.N.R.), which manages the river, has experimented with several control techniques in recent years. Since 2015, 15 experimental plots have been monitored on the banks of a restored river appendix to measure the effect of three control methods: confinement by felt, repeated mowing and the planting of competing species and/or species with allelopathic power: *Viburnum opulus*, *Rhamnus frangula*, *Sambucus ebulus* and *Juglans regia*. Each year, the number of stems, the number of elderberry plants, the height of the plants and photographs were collected. After six years of monitoring, the results showed that the density of knotweed stems decreased by 50 to 90% on all plots. The control methods are sustainable and are gradually gaining in efficiency. The establishment of native plants coupled with regular manual maintenance can reduce the development of Japanese knotweed. Continued monitoring over the next few years will determine the kinetics of the total eradication (i.e. 0 stem/plot) of the Japanese knotweed by these methods.

Keywords : *fallopia japonica*, interspecific plant competition , Rhone river, riparian trees

Conference Title : ICEVTSE 2021 : International Conference on Event Tourism and Sports Events

Conference Location : Stockholm, Sweden

Conference Dates : July 15-16, 2021