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[i](Ludwigia grandiflorasubsp. hexapetala[/i] and
[i]Ludwigia peploides subsp. montevidensis)[/i]:
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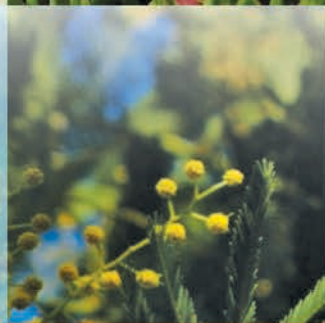
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**Biology, ecology and fertility of Water Primroses
(*Ludwigia grandiflora* subsp. *hexapetala* and *Ludwigia peploides*
subsp. *montevidensis*): variability and consequences for
management in Western France**

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Waterprimroses (*Ludwigia grandiflora* subsp. *hexapetala* (Hook. & Arn.) G.L.Nesom & Kartesz and *Ludwigia peploides* subsp. *Montevidensis* (Spreng.) P.H.Raven) are expanding in Western France and become fertile, depending on species, populations and sites. A review on existing data in literature on biology and ecology of both species in Western France is presented in a first part.

Results on fertility obtained on more than twenty populations/years are presented. Differences between species exist: in many cases, *L. peploides* has higher germination rates than *L. grandiflora*. Vernalisation increases much germination rates in any case, up to more than 80%. Aquatic and terrestrial populations present small differences in the same site, but autumn collection followed by laboratory cold exposure are less efficient than spring collection after winter cold. Field seed production is important with more than 40,000 seeds produced per m².

The possibility of seed dispersal when flooding exists, and we observed *in situ* seedlings on some meadows. Thus fertility modifies cattle-breeder practices and all wetland management in heavily colonised sites, with special attention paid to early stages of establishment.

Keywords: *Ludwigia*; Population; Fertility; Adaptative strategy