

Comparison of pesticide monitoring techniques using passive sampling and automatic water samplers in a Swedish stream

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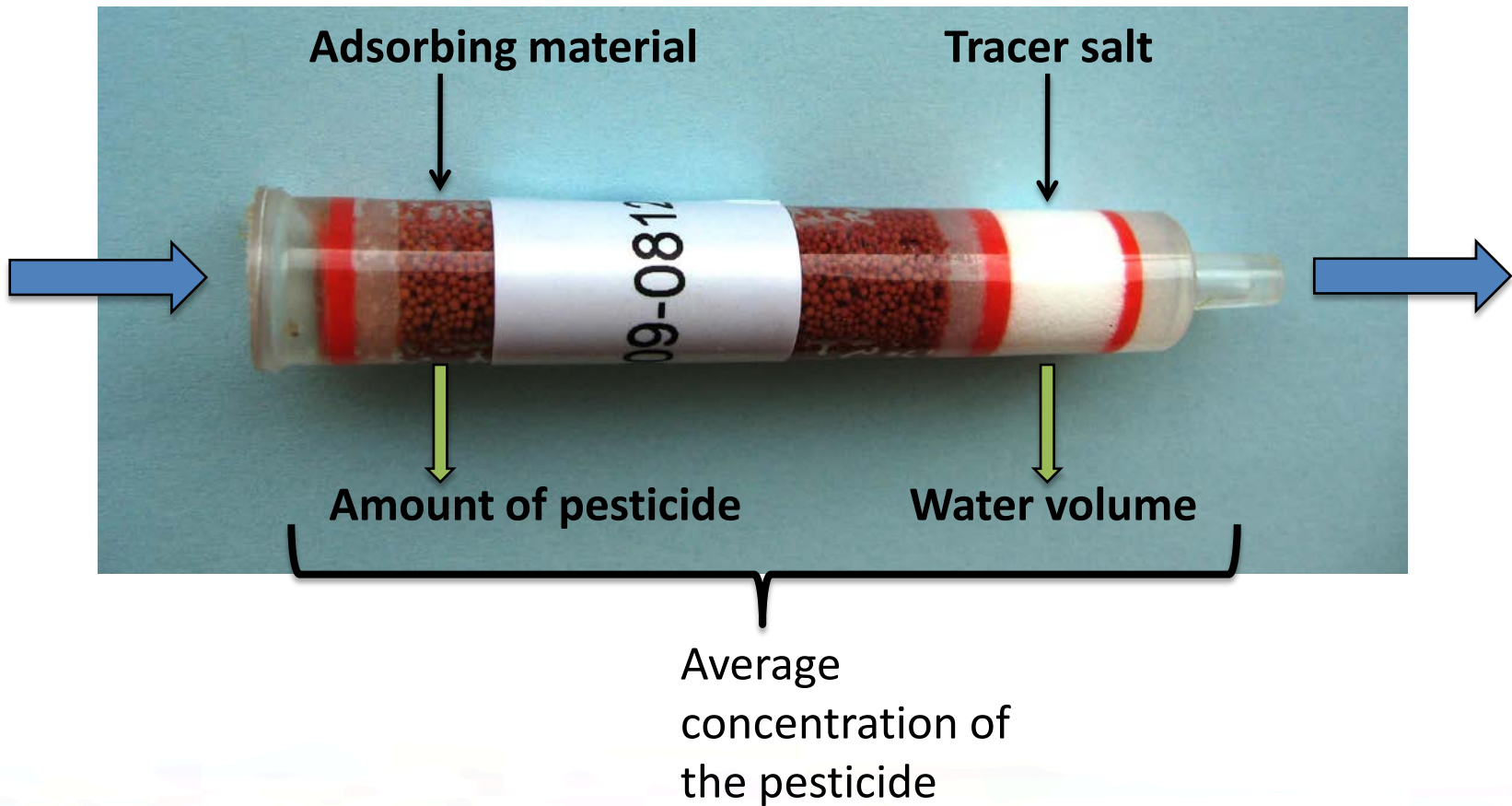
Swedish University of Agricultural Sciences



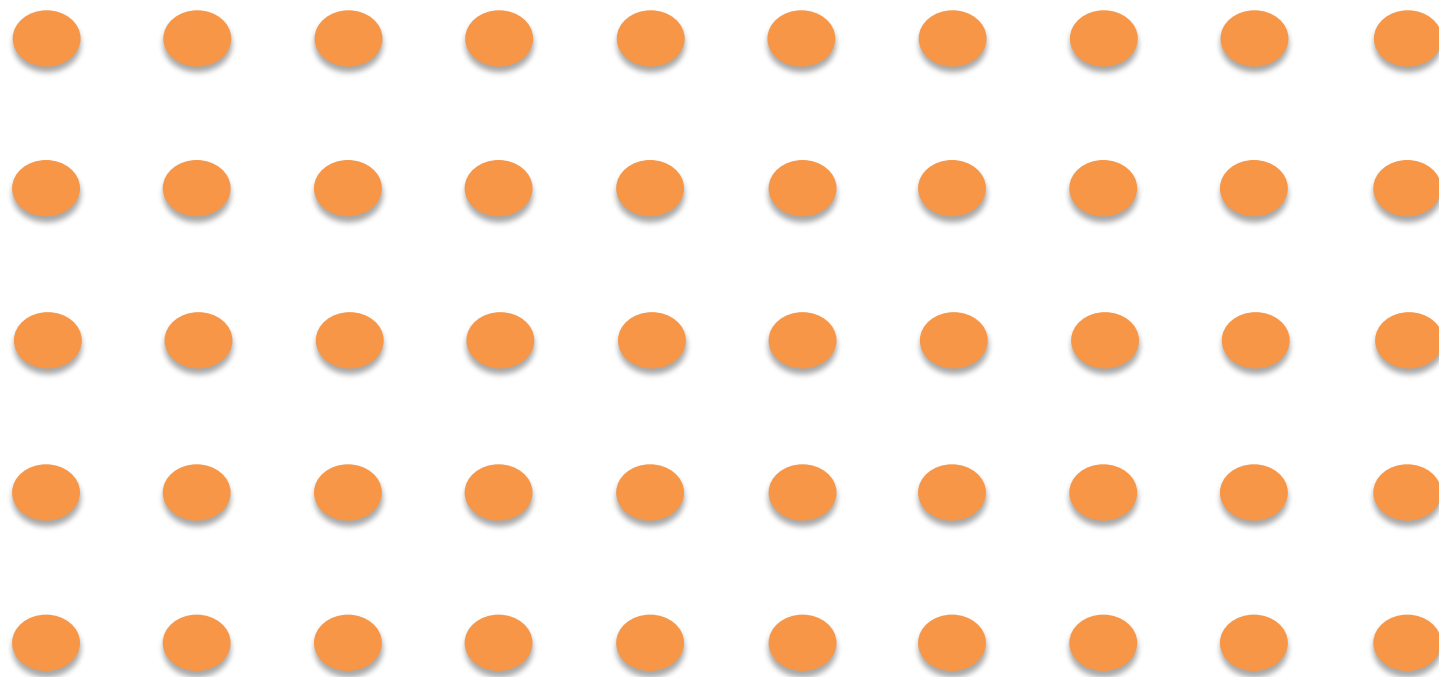
- Regular monitoring since 2002
- Need simple monitoring method -WFD -Research
- 9 weeks parallel sampling



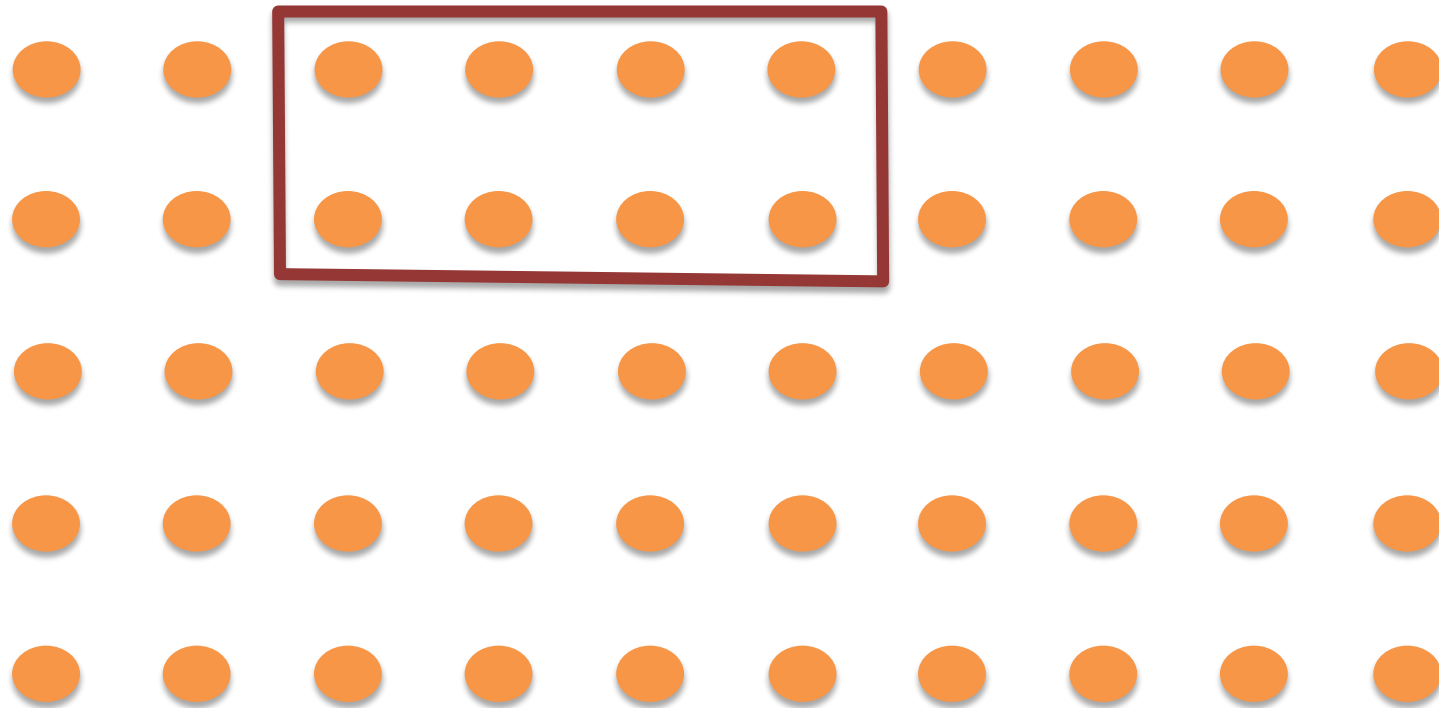
Passive sampler



50 pesticides analysed

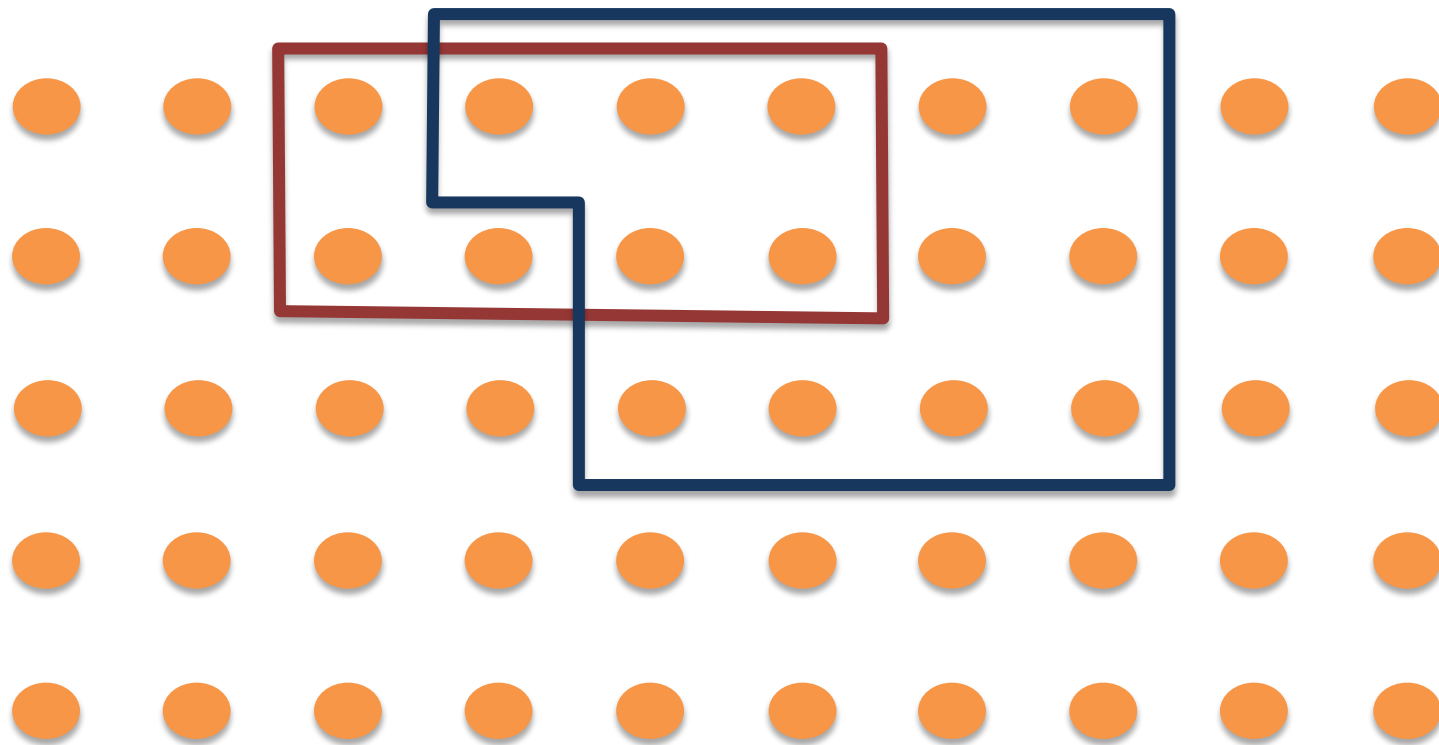


Passive sampling found 8 substances



Passive

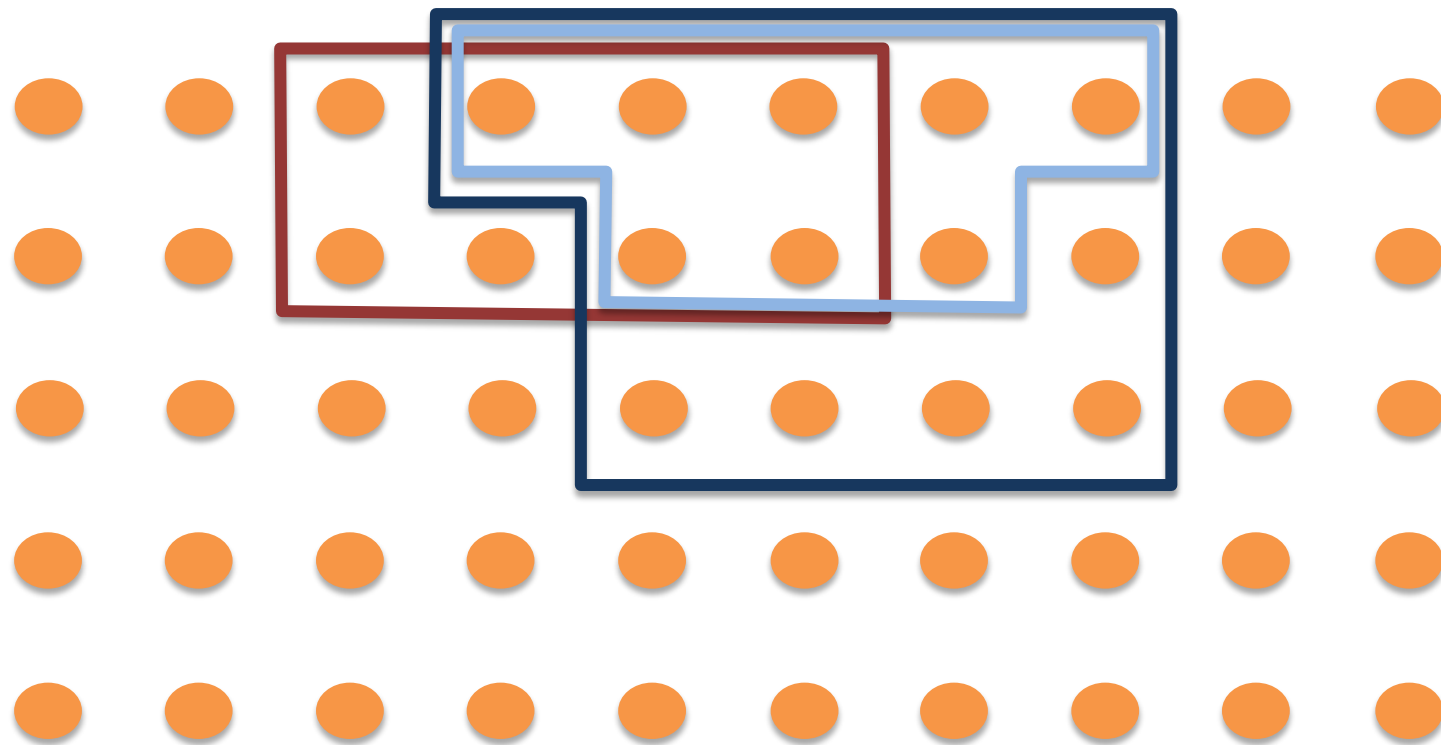
Regular sampling found 13 substances



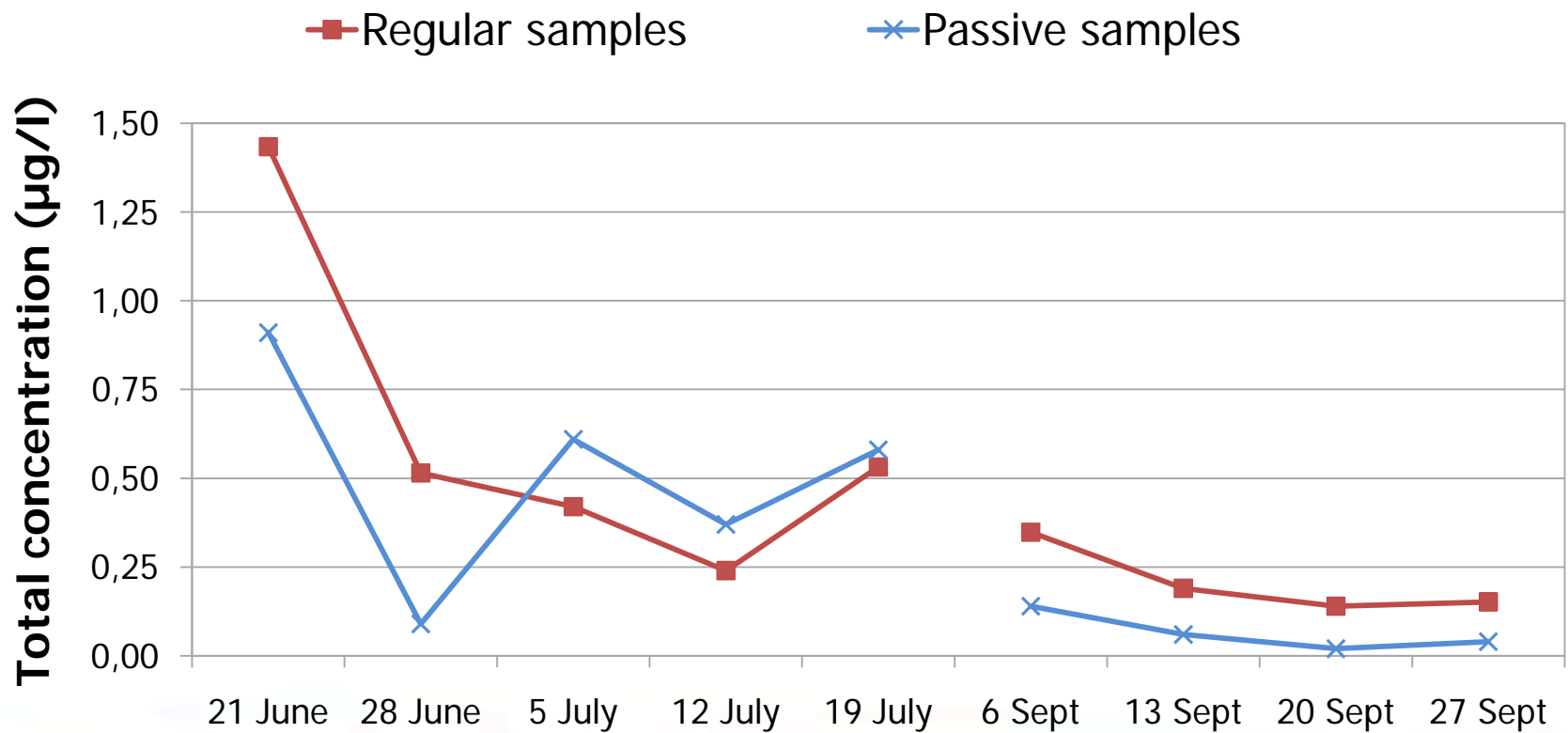
Passive

Regular with common
LOQ found 8 substances

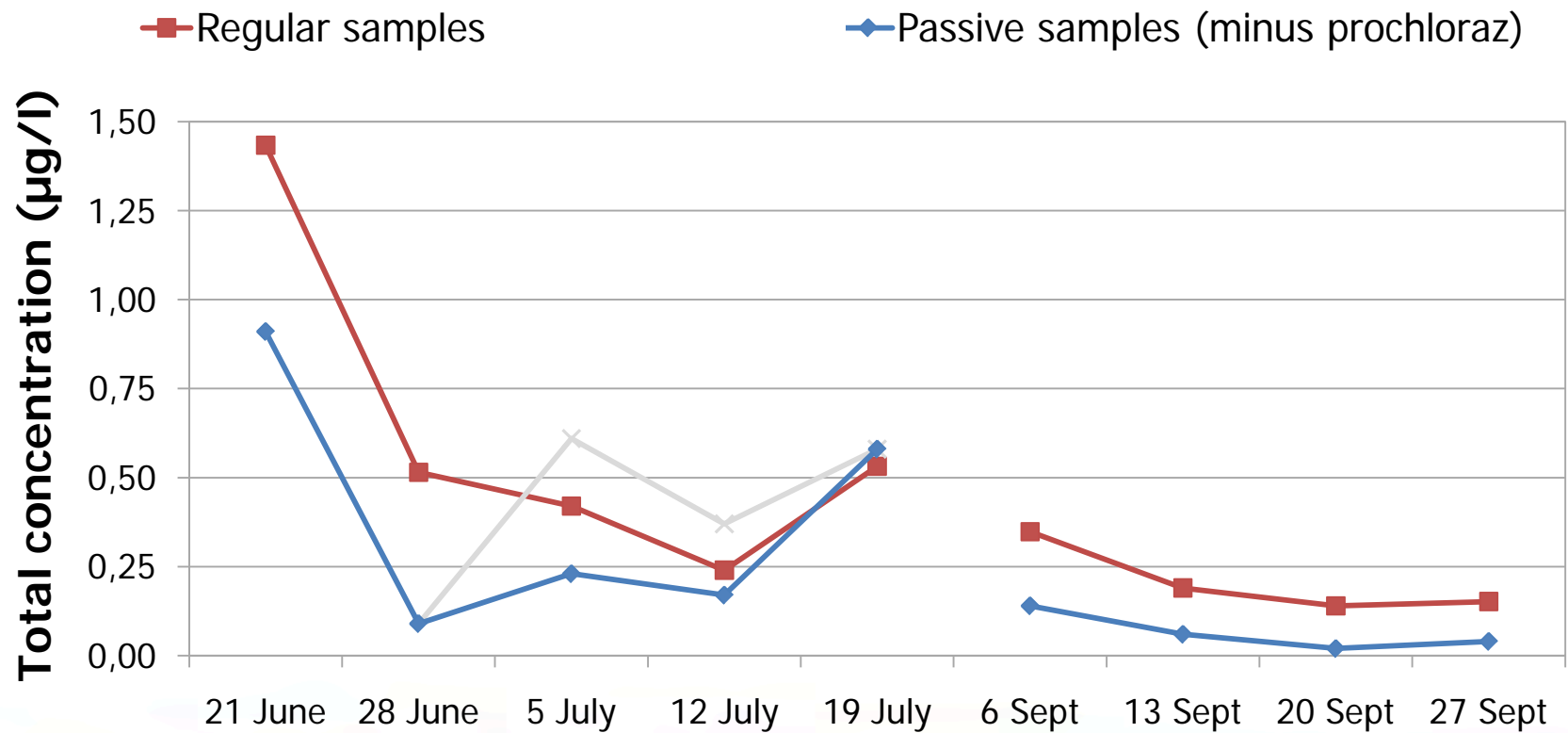
Regular



Total concentration of pesticides per sample (lowest common LOQ)



Total concentration of pesticides per sample (lowest common LOQ)



Conclusions

- Promising method in need for improvement
 - False positives
 - Little correlation in terms of concentrations
 - Lower LOQ (limit of quantification)
 - More relevant pesticides

