

Legends

Fig. 1. Location of the sampling sites, main towns and industrial units along the Ave River, Northwest Portugal.

Fig. 2. Principal Component Analysis of selected stream water variables at six sampling sites in the Ave River. The direction of the arrows reflects the maximum change of each variable. Number of samples is indicated in Table 1.

Fig. 3. Macroinvertebrates colonising alder leaves in coarse-mesh bags at six sampling sites in the Ave River. (a) Taxon richness (■) and mean (\pm SE) macroinvertebrate density (□); (b) Biological Monitoring Working Party index adapted to the Iberian Peninsula - BMWP' (■) and Belgian Biotic Index - BBI (□); and (c) Ephemeroptera+Plecoptera+Trichoptera - EPT (■) and Oligochaeta (□), as mean percentage (\pm SE) of the number of individuals. Data represent five sampling dates.

Fig. 4. Correspondence Analysis of macroinvertebrate taxa colonising alder leaves in coarse-mesh bags at six sampling sites in the Ave River. Taxa with the highest relative and absolute contributions are shown in bold. Macroinvertebrate taxa: AE, Aeshnidae; AN, Ancylidae; AT, Athericidae; BA, Baetidae; BY, Bythinellidae; CA, Caenidae; CAL, Calopterygidae; CH, Chironomidae; CO, Coenagrionidae; DU, Dugesiididae; DY, Dytiscidae; EL, Elmidae; EP, Ephemerellidae; ER, Erpobdellidae; GL, Glossiphonidae; GY, Gyrinidae; HYDRA, Hydracarina; HY, Hydrobiidae; HYD, Hydrophilidae, HYDR, Hydropsychidae;

HYDRO, Hydroptilidae; HYG, Hygrobiidae; LE, Leptophlebiidae; LEU, Leuctridae, LY, Lymnaeidae; OL, Oligochaeta; PH, Physidae; PL, Planorbidae; PLA, Platycnemidae; PO, Polycentropodidae; PS, Psychodidae; SI, Simuliidae; and SP, Sphaeridae. Sampling sites: L1, L2, L3, L4, L5 and L7.

Fig. 5. Taxon richness (■) and mean (\pm SE) sporulation rates (□) of aquatic hyphomycetes colonising alder leaves in fine-mesh bags during the first three weeks of immersion at five sampling sites in the Ave River. Data from L4 were excluded due to high debris content in the slide preparations which made conidia counts doubtful.

Fig. 6. Correspondence Analysis (CA) of aquatic hyphomycete taxa colonising alder leaves in fine-mesh bags at sampling sites in the Ave River. Taxa with the highest relative and absolute contributions are shown in bold. Hyphomycete taxa: AA, *Alatospora acuminata* Ingold; AF, *Anguillospora filiformis* Greathead; AP, *Alatospora pulchella* Marvanová; AT, *Articulospora tetracladia* Ingold; CA, *Clavariopsis aquatica* De Wildeman; CL, *Clavatospora longibrachiata* (Ingold) Marvanová et S. Nilsson; DF, *Dimorphospora foliicola* Tubaki; FC, *Flagellospora curta* J. Webster; HL, *Heliscus lugdunensis* Sacc. et Thérry; HST, *Heliscella stellata* (Ingold et Cox) Marvanová et S. Nilsson; HSU, *Heliscus submersus* H.J. Hudson; LA, *Lemonniera aquatica* De Wildeman; LC, *Lunulospora curvula* Ingold; MY, *Mycocentrospora* sp.; S1, Sigmoid 1; S2, Sigmoid 2; S3, Sigmoid 3; S4, Sigmoid 4; TA, *Tricladium angulatum* Ingold; TC, *Tricladium chaetocladium* Ingold; TE, *Tetrachaetum elegans* Ingold; TS, *Tricladium splendens* Ingold; and VE,

Varicosporium elodeae Kegel. Sampling sites: L1, L2, L3, L5 and L7. Data from L4 were excluded due to high debris content in the slide preparations which made the identification of conidia doubtful.

Fig. 7. Linear regressions of leaf breakdown rates (k) in coarse-mesh (\circ) and fine-mesh (\bullet) bags against a pollution gradient in the Ave River, defined by the first axis of PCA of the stream water variables (Fig. 2).