

Water infiltration into soils under riparian buffer strips

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The infiltration capacity of the soil is a primary factor for the efficient retention of plant nutrients in riparian buffer strips. However, water repellency (hydrophobicity) due to vegetation is a widespread problem (Doerr, et al., 2000; Jarvis, et al., 2008). Accordingly, we investigated water infiltration as affected by vegetation cover, moisture condition and soil type. Permanent grass cover without cutting drastically reduced water infiltration into the soil after a long dry period. Soil texture had also significant influence on the infiltration capacity. To link the pathway of water outflow from riparian strips with phosphorus retention, a new research will be carried out during 2010-2012.

References

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