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Phosphorus fractionation in sediments of small agricultural River

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The Psenner fractionation schema for phosphorus fraction determination has been applied for sediment from small agricultural river. The investigation has been carried on a small 23.4 km², lowland, agricultural Zagożdżonka watershed located about 100km from Warsaw capital of Poland. The samples have been taken during spring and summer time. For comparison of phosphorus content between bottom and suspended sediment the suspended sediment settling tank has been constructed. The results of phosphorus contents from collected suspended sediment and bottom sediment has been discussed. The total phosphorus content from bottom sediment varied from 0,56 to 1,83 % of P₂O₅/ kg of dry weight and 0,30 to 1,34 % of P₂O₅/ kg of dry weight from suspended sediment collected in settling tank. During the investigation period the total phosphorus concentration in river water varied form 0,3 to 0,7 mgP/l where dissolved phosphorus varied from 0,1 to 0,7 mg PO₄/l.