BEWERTUNG NACHHALTIGER LANDWIRTSCHAFTLICHER BODENNUTZUNG AUF DER BASIS VON SCHWERMETALLBILANZEN? – MÖGLICHKEITEN UND GRENZEN EINES NACHHALTIGKEITSINDIKATORS

BARBARA MALBURG-GRAF, STUTTGART

SUMMARY

The main goal of the article is the explanation of a system for the assessment of a sustainable agricultural land use based on the sustainability indicator "heavy metal balance". From the operationalisation of the overall concept "sustainable agricultural land use" results the heavy metal balance as one sustainability indicator. The assessment system checks if today's soil conditions of an agricultural used field are already grave, if heavy metal accumulation is possible, if heavy metal input has a tenable level and if currently groundwater or crops are at risk of becoming contaminated. Assessment thresholds are analysed and discussed. The assessment system shows the sustainability problems of agricultural used fields concerning the soil heavy metal conditions on one hand and concerning the application of heavy metal contaminated fertilisers on the other hand. The indicator "heavy metal balance" should be a part of an indicator system beside other indicators for the use in an agricultural expert system.