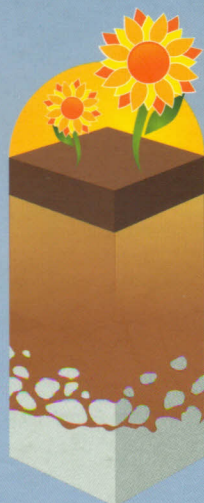


# XXXII CONGRESSO BRASILEIRO DE CIÊNCIA DO SOLO



O SOLO E A PRODUÇÃO  
DE BIOENERGIA:  
PERSPECTIVAS E DESAFIOS  
2 a 7 de agosto de 2009  
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## R E S U M O S



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Realização:



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[2669] **A FERTILE FLOODPLAIN SOIL IN THE BORDER OF RIO NEGRO IN THE CENTRAL AMAZON BRAZIL.**

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1,3. *Embrapa Amazônia Ocidental, Manaus, Am, Brasil*; 2. *Ibama, Manaus, Am, Brasil*; 4. *Sipam, Manaus, Am, Brasil*; 5. *Ufam, Manaus, Am, Brasil*.

**Resumo:**

The called rio Negro (The black river) is one the giant river in the Brazilian Amazon. It flows in southwestern direction and met the Solimões river near the city of Manaus. Backwater rivers such as the river Negro drain highly weathered sandy soils of the central Amazon basin. They are characterized by low sediment and nutrient concentrations, and dark colored acid waters (pH around 4,0) are rich only in dissolved humic substances. The Portuguese word "varzea" means floodplains but only soil fertile floodplains formed near brownwater river. The varzeas are typical in many places in the Amazon where the brown-water rivers such as the river Solimões (the Amazon River upstream of Manaus) contributed to enrich the alluvial soils with a high suspended sediment load that are rich in dissolved and suspended nutrients. This work had the objective to to present some soil analysis and a soil profile description to prove that an area around 1100 hectares in the river Negro shows typical varzeas soils, in the Brazilian Classification (Gleissolos Háplicos eutróficos) , a very fertile Gleysol. This located area near the city of Manaus is still having a contribution of sediments from the Ariau river that make a channel between river Solimões and the river Negro. Ariau may change the flow direction during the year. When the river Ariau flows to river Negro it carry sediment that deposit in some areas and create rich soils. The relatively large area of rich soil found near the river Negro in this work is not explained by the actual amount and mechanism of sedimentation from river Solimões. In the past it was a more intense processes or this area is a relict of the sediments that flowed by the river Negro in the past as some researcher speculated. Further work is necessary to shows the origin and datation of the sediment in the different layers in this area.