

## **Sergipe research reveals student nutritional condition**

Research conducted by Embrapa Coastal Tablelands in partnership with Sergipe Federal University (UFS) Nutrition Center and State Secretariat for Education has evaluated the nutritional condition of state school students from Assentamento Santana dos Frades, Pacatuba, Sergipe. Research findings have revealed serious nutritional deficit and results will be presented at the III Annual Biofortification Meeting in Brazil ([www.cpatc.embrapa.br/biofortbrasil/](http://www.cpatc.embrapa.br/biofortbrasil/)), to be held from May 31 to June 05 in Aracaju, SE.

Seventy-four students in the 4-18 age range were evaluated and 64 percent of them were found to have below average Body Mass Index (BMI)-for-age percentiles. As far as stature is concerned, 10 percent of children and 15.9 percent of adolescents ranked as low-stature. Just two of them were found to be overweight.

The same research will be conducted in Vale do Jequitinhonha (MG) and São Luís (MA). The study is part of a broader project involving the development and dissemination of staple cultivars with higher iron, zinc and beta-carotene (micronutrients) contents. In Brazil, the project is known as BioFort. Coordinated by Embrapa Food Technology (Rio de Janeiro-RJ), it involves a research network both in Brazil and abroad, mainly with support from HarvestPlus and AgroSalud programs.

Surveyed kids and adolescents are children of settled farmers who produce their own foodstuff and make a living selling coconut, cast nets, cattail and aricury palm fiber craftwork. Low purchasing power combined with low farming productivity contributes to the observed malnutrition scenario.

Since this research involves human participation in food consumption, the project was evaluated and approved by Sergipe Federal University Ethics Committee. The Committee evaluates possible risks to humans.

According to Embrapa Coastal Tablelands (Aracaju-SE) researcher Fernando Curado, "in addition to determine the nutritional condition of the students, the project will favor the introduction of foods with higher micronutrient content into schools and family crop farming."

Therefore, Pilot Units consisting of pumpkin, sweet potato, common beans, cowpea, cassava, and maize crops with higher micronutrient contents and obtained through conventional breeding (crossings between varieties of the same species). These units are intended for support to the dissemination of cultivars among producers registered at local schools.

In Sergipe, the project has the support of other Embrapa units, Sergipe Federal University (UFS),

State Secretariats for Social Inclusion and Development, Education and Health, and Empresa de Desenvolvimento Agropecuário de Sergipe (Emdagro).

According to the National Household Sample Survey (IBGE, 2006), the State of Sergipe boasts Northeast's lowest serious food insecurity rate. However, Food and Nutritional Surveillance System (SISVAN, 2007) data referring to Family Allowance Benefit Program beneficiaries reveal 9 percent malnutrition rate, according to the weight-to-age ratio in children up to seven years old.

Biofortification – Research details will be presented at the III Annual Biofortification Meeting in Brazil. The event will be attended by Minister of Agriculture Reinhold Stephanes and 200 researchers and technical experts from all over Brazil and abroad. The Meeting is a joint Embrapa Food Technology and Embrapa Coastal Tablelands event held in partnerships with HarvestPlus and AgroSalud programs with support from Monsanto, Nestlé, Pepsico, and Halotek Fadel.

For further information:

Ivan Marinovic Brscan (1634/09/58/DF). [ivan@cpatc.embrapa.br](mailto:ivan@cpatc.embrapa.br)

Embrapa Coastal Tablelands

79 4009-1344

Soraya Pereira (MTB 26165/SP). [soraya@ctaa.embrapa.br](mailto:soraya@ctaa.embrapa.br)

Embrapa Food Technology

21 3622 9739 or 9881 0535