## Social Traps

The year 2004 has seen the largest armyworm infestation in Tanzania for 10 years. This caterpillar devours wild grasses, maize and rice as well as other grass crops. Current armyworm



Armyworms cause damage to crops such as rice and this year are a social problem, marching along roads and through children's classrooms

population densities are not only devastating crops but, as a result of their marching through roads and classrooms, are also preventing younger school pupils have been from attending school.

As armyworm numbers build up in wild grasses, farmers have, historically, in outbreak years been faced with large populations invading their farms. Inefficiencies in the communication of warnings of armyworm build-up have been such that armyworm warnings arrive late, even after the armyworm itself. Project R7966 has been working to empower communities in outbreak areas to forecast and respond to the early signs of an armyworm infestation, before the armyworm population grows to plague proportions.

Communities nominate a representative who is trained in the deployment and use of a simple pheromone trap which captures male moths. When adult moths caught in the trap in 24 hours achieve a threshold number, the forecaster knows that the hatching of armyworm eggs is imminent. This information with a recommendation to apply insecticide to cereal crops is passed on to the community through local communication systems, e.g. churches, mosques and posters.

The Government of Tanzania has supported this initiative through the provision of knapsack sprayers for the application of pesticides, and communities are keen to purchase additional sprayers. It is estimated that the annual cost of 'lures' for the pheromone traps could be as low as £800 for the key areas of armyworm infestation. Additional start-up funds have also been received from United States Agency for International Development (USAID) and the Government of Tanzania for this initiative to be replicated in other districts prone to armyworm infestation.



Community representatives being trained to set up and deploy pheromone trap for armyworm



**R7966**: Identifying the factors causing outbreaks of armyworm as part of improved monitoring and forecasting systems

Contact: John Holt, Natural Resources Institute (NRI), UK

**Photos:** Wilfred Mushobozi, Roger Kirkby and Frances Kimmins