The field day was attended by 101 persons mostly farmers (61), a number of agricultural extension officers (6), research scientists, Non-Governmental Organisation (NGO) officers and seed company representatives.

Feedback was collected through a questionnaire issued to the farmers and the comments and the questions they asked as they were being taken round the demonstrations. Sixty five completed questionnaires were received from the participants.

Almost all the farmers wanted to know what causes maize streak virus disease and whether it was seed borne and/or soil borne. It was explained to them that the disease is neither seed borne nor soil borne but that it is transmitted by small insects, leafhoppers. The leafhoppers were there for demonstration. Some of the farmers asked whether disease has any effect on humans and animals when fed on infected stover. The response was that it has no effect. Farmers wanted to know how the disease is controlled. Use of resistant/tolerant maize varieties and seed dressing were given as some the control methods.

Many farmers wanted to know the recommended fertilizer for growing maize in their farms and were told the best solution is to have their soil tested. They were also advised to be seeking advice from their local extension officers as they know the recommended fertilizer for their respective areas.

Farmers were impressed by the MSV resistant varieties like Muguga 1. (Out of the 65 respondents, 35 chose Muguga 1 as one they would plant when threatened by MSV and wondered whether they could buy seed from the seed stockists.) On this point farmers were advised to be buying and seeking advice from reputable seed stockists in the area as they are also aware of the new variety releases. On Muguga 1 farmers were told it will soon be in the market.

Interestingly, one farmer wondered whether MSV was the greatest threat to maize production. The farmer was told that it is a threat to maize production and that it is a serious problem in the area in terms reducing both grain and stover yields, especially if it attacks the crop at an early growth stage.

On the use of herbicides in the control of weeds, farmers wanted to know when and how to apply the herbicides. They were told to apply the (pre-emergence) herbicide when the
soil is moist and before the crop emerges. Many farmers argued that they dry plant their maize and they were informed that they could dry plant, but they must wait until the soil has enough moisture before applying the herbicide. On whether the herbicide has any effect on the crop, farmers were told that if it is applied before crop germination it has no effect. Some farmers wanted to know where they can purchase the herbicides in small packages and were informed that plans are underway to make the herbicide available in small packages. Many farmers appreciated that the herbicides were effective in controlling weeds and the crop suffered less competition from weeds for nutrients and moisture. Herbicide use resulted in labour saving and released labour and time for other farm activities. Some farmers asked whether the herbicide had any harmful effect on the person applying them. They were told that herbicides are poisons and one must wear protective clothing when spraying the herbicides.

On silage making, farmers were very interested in the demonstration of small-scale procedures (by the NGO Land O’ Lakes). The farmers seemed to know very little about silage making and indicated that they would start making it at their farms.

Responses on the questionnaire showed that most farmers chose Muguga 1 (35) and PAN 67 (25 farmers) as varieties resistant MSV. On the issue of early onset of MSV and stover yield, the majority of the farmers responded that Muguga 1 was the least affected while H511 yielded the least amount of stover. However, a few of the farmers didn’t understand the question and either filled the wrong information or left the question unanswered.

On the question of weed control, all the farmers, apart from three, recorded that they preferred herbicide to hand weeding as it takes less time, is more economical and more effective in controlling weeds. The crop from the herbicide treated plots grows faster and more vigorously and yields more in both grain and stover. The three farmers who said they prefer hand weeding said they are smallholders and use the weeds as animal feed.

All the farmers reported that they would be interested in future field days and would like to be involved through having some of the trials conducted in their own fields other than at the centre. Farmers would also like to see/know how to control diseases in other crops like potatoes and beans.

Farmers requested for more interaction with the KARI Muguga research centre.

Report prepared by Francis Musembi of KARI-NARC-MUGUGA.

Enquiries in Kenya to Dr Jackson Njuguha, KARI-NARC-MUGUGA, PO Box 30148, Nairobi, Kenya. Email: jack.kari@net2000ke.com

Enquiries in the UK to Dr Alistair Murdoch, The University of Reading, Department of Agriculture, Earley Gate, Reading RG6 6AR. Email: a.j.murdoch@reading.ac.uk

This publication is an output from a research project funded by the United Kingdom Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

Project R7955, IPM of maize forage dairying: Renewable Natural Resources Knowledge Strategy (RNRKS) Livestock Research Programme