been initiated to study the effectiveness of macropropagation technology in producing disease free banana seedlings. The study commenced with a survey to identify the important diseases and insect pests of bananas in Eastern and Central Kenya. Pests and pathogens identified were isolated from diseased banana plants. The importance of the isolated organisms in banana health is being determined through pathogenicity tests carried out under greenhouse conditions. Macropropagation nurseries have been established at Kenyatta University and in six sites in farmers’ fields representing different agroecological zones, including high, mid and low altitudes. Corms obtained in accordance with established quality assurance protocols have been propagated and the health of the macropropagated banana seedlings is being monitored over a 12 weeks period. The pathogenic organism isolated most commonly is Fusarium oxysporum f. sp. Cubense and radopholus slmillis in some cases. On average 98% of the propagated corms have produced healthy seedlings that show no symptoms of disease. Less than 1% of the corms propagated rotted in the propagation media (sawdust) due to as yet undetermined causes: A scarcity of healthy corms has been encountered in areas with orchards having high weevil Infestation since most corms do not meet the standard required for macropropagation. The results obtained so far suggest that corms for macropropagation should be selected in orchards where mats are not more than three years old. The information obtained through the study will form a basis of recommending macropropagation technique as an effective method to produce healthy banana seedlings as well as for identifying the key control points for improvement of the macropropagation protocol.