

2008

May

## Potentials for Integration in Oil Palm Plantations\*

SUBOH ISMAIL, RAJA ZULKIFLI RAJA OMAR AND KAMIL AZMI TOHIRAN

*Biology Division, Malaysian Oil Palm Board, P O Box 10620, 50720 Kuala Lumpur, Malaysia*

*Crops and livestock integration with oil palm is one of the thrust areas in the Malaysian Palm Oil Board's (MPOB) research programmes as outlined in its strategic plan. It is in line with ensuring the high income strategy as envisaged by MPOB and the national aspiration to achieve self-sufficiency in food production. Integration of crops or livestock with oil palm is possible since sunlight can penetrate the oil palm canopy especially during the immature stage enabling other crops to be grown between rows of oil palm. At the mature stage, some light still can penetrate to the ground and allow several types of vegetation/weeds to grow which can be used as forage for livestock. The integration of crops and livestock generates additional income to the oil palm growers and improves productivity of the land. Various studies have shown that several cash crops are capable of generating additional income of between RM175-RM870 per hectare per month when integrated with oil palm. To be feasible and economically viable, suitable crops or livestock and their production systems need to be well established. Crops integration is limited to the first two years of oil palm planting. To extend the integration further, oil palm is planted in double avenue planting system. This planting system allows higher light penetration and provides wider space between two palm avenues. Observations have shown that in a field of five-year oil palm, there is still about 25-30 per cent of the area available for cultivation of crops. Early results indicate that the oil palm yield in the double avenue is comparable to that planted using the conventional triangular system.*

**Keywords:** *Integration, crops, livestock, maximise land use, increased income.*