

THE PERFORMANCE OF BEEF CATTLE
INTEGRATED WITH OIL PALM PLANTATIONS

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PALM PLANTATIONS

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DEDICATION

I dedicate this thesis to my wife, Sharifah and my children, Amalina, Asilah, Amin, Azri and Azim for their patience, understanding and unbounded love in making this thesis a reality.

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A study was conducted to determine the performance of beef cattle in oil palm plantation in three cattle zoning areas in Terengganu. Growth performance, conditioned age and management advantages of practices and nutrition were assessed. One hundred and ten heads of cattle of various age and sex were identified in each of the three selected farms and were allowed to graze freely under a controlled rotational grazing. Data on the initial and quarterly body weights were taken throughout the twelve months of the year of 2003. Fifteen random samples of the undergrowths using 1 m x 1 m quadrant were taken from each paddock for proximate composition of the feed. The beef cattle integrated with oil palm plantations showed a significant ($p < 0.01$) difference in the live weight gains and conditioned age. A linear relationship or significant

correlation exists between the specified data. The average daily gains (ADG) at RISDA ESPEK ($r=0.570$) appeared to be higher by 30.8% in comparison to Ladang Rakyat Terengganu ($r=0.603$) and by 32.0% in Animal Breeding Center, Tersat ($r= 0.778$) respectively. There were no significant differences ($p>0.05$) in the nutrient contents of the forages among the three plantations. The carcass conformation were significantly difference ($p<0.05$) with respect to the live body weight and meat weight of the animals within the groups. There was a very high correlation and very dependable relationship existed between the live weight and the meat weight of the carcass within the group of beef cattle in RISDA ESPEK ($r=0.975$), Ladang Rakyat Terengganu ($r=0.978$) and ABC Tersat ($r=0.935$). This study indicated that all the beef animals performed well under the integrated system in the oil palm plantations. Rearing of beef cattle in oil palm plantations is an excellent approach to increase the animal population and beef production.