CHAPTER IV

DISCUSSION

The method techniques employed in the in vitro study as described by Bottari, et al (4), and in the in vivo study, for percutaneous absorption of Me. Sal., as described by Wurster and Kramer (8) were found suitable, convenient and satisfactory.

The ointments made of sugarcane wax (m. 75-78^{o}C), theobroma oil (m. 32^{o}-35^{o}C), and ricebran wax (m.75^{o}-80^{o}C), Table 5, indicated high percutaneous absorption of Me. Sal., high to low, respectively. This would be due to its specific skin penetration property, individually, rather than the effect of its melting points.

The results obtained from the in vitro study of ricebran wax comparing with other waxes ointments at the same Me. Sal. contents, indicated better releasing rate at 50% w/w Me. Sal. content, while the lower releasing rates were obtained with the 25% and 75% w/w Me. Sal. contents. Probably, it was plausible that, at 50% w/w Me. Sal. containing in the ricebran wax ointment, could provide best condition for better releasing of Me. Sal. in the physiolgical fluid.

Beeswax, from this study, could provide regular releasing rates of Me. Sal. from the ointments (25%, 50% and 75% w/w Me. Sal. contents) into the physiological fluid while the other could not; but the beeswax was found inferior than the sugarcane wax and theobroma oil, in the in vivo study.

By Comparing the results obtained from in vitro and in vivo study, it would be seen that sugarcane wax would be the most suitable for being used to replace the beeswax which is more expensive and less available raw material.