List of Figures

Fig. 1.1 Geographical distributions of three major filarial species
Fig. 1.2 Life cycle of *Wuchereria bancrofti*
Fig. 1.3 A 50-year-old man with grade 3 lymphoedema in left leg
Fig. 1.4 *Brugia malayi* microfilaria
Fig. 1.5 *Brugia malayi* Adult worms in tissues of *Mastomys coucha*
Fig. 1.6 *Mastomys coucha*
Fig. 1.7 *Meriones unguiculatus*
Fig. 1.8 Chemical structure of Diethylcarbamazine
Fig. 1.9 Chemical structure of Albendazole
Fig. 2.1 Fractionation of *B. malayi* adult worm (A) and Microfilaria (B) extract by Sephadex G-200 column chromatography
Fig. 3.1 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of circulating microfilaraemia
Fig. 4.1 Effect of DEC treatment followed by re-infection with *B. malayi* one month after the beginning of the treatment: Level of BmA specific IgG antibodies in infected (A) and normal (B) *M. coucha*
Fig. 4.2 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA-I specific IgG antibodies in infected (A) and normal (B) *M. coucha*
Fig. 4.3 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf specific IgG antibodies in infected (A) and normal (B) *M. coucha*
Fig. 4.4 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf-I specific IgG antibodies in infected (A) and normal (B) *M. coucha*
Fig. 5.1 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 5.2 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA-I specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 5.3 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 5.4 Effect of DEC treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf-I specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 6.1 Cell proliferative response of lymph node (A) and spleen cells (B) to different stimulants: Normal *M. coucha* before beginning of the treatment

Fig. 6.2 Cell proliferative response of lymph node (A) and spleen cells (B) of normal *M. coucha* to different stimulants: One-month post DEC treatment

Fig. 6.3 Cell proliferative response of lymph node (A) and spleen cells (B) to different stimulants: L3 infected *M. coucha* one-month post infection (Second month post DEC treatment)

Fig. 6.4 Effect of DEC treatment followed by re-infection: Cell proliferative response of lymph node (A) and spleen cells (B) to the stimulants before treatment, (One-month post-treatment and one-month post-re-infection (Second-month post treatment)

Fig. 7.1 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of circulating microfilaraemia

Fig. 8.1 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA specific IgG antibodies in infected (A) and normal (B) *M. coucha*
List of Figures

Fig. 8.2 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA-I specific IgG antibodies in infected (A) and normal (B) *M. coucha*

Fig. 8.3 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf specific IgG antibodies in infected (A) and normal (B) *M. coucha*

Fig. 8.4 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf-I specific IgG antibodies in infected (A) and normal (B) *M. coucha*

Fig. 9.1 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 9.2 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmA-I specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 9.3 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 9.4 Effect of ALB treatment followed by re-infection with *B. malayi* one-month after the beginning of the treatment: Level of BmMf-I specific IgM antibodies in infected (A) and normal (B) *M. coucha*

Fig. 10.1 Cell proliferative response of lymph node (A) and spleen cells (B) of normal *M. coucha* to different stimulants: One-month post ALB treatment

Fig. 10.2 Cell proliferative response of lymph node (A) and spleen cells (B) to different stimulants: L3 infected *M. coucha* one-month post infection (Second-month post ALB treatment)

Fig. 10.3 Effect of ALB treatment in *B. malayi* infected *M. coucha* followed by re-infection with *B. malayi*: Cell proliferative response of lymph node (A) and spleen cells (B) to the stimulants before treatment, one month post-treatment and one-month post-re-infection (Second-month post-treatment)
List of Figures

Fig. 11.1 SDS-PAGE profile of BmA, BmMf, BmA-I and BmA-II

Fig. 12.1 Reactivity of BmA crude extract with DEC treated and re-infected *M. coucha* sera

Fig. 12.2 Reactivity of BmA-I with DEC treated and re-infected *M. coucha* sera

Fig. 12.3 Reactivity of BmA-II with DEC treated and re-infected *M. coucha* sera

Fig. 12.4 Reactivity of BmMf crude extract with DEC treated and re-infected *M. coucha* sera

Fig. 12.5 Reactivity of BmA crude extract with ALB treated and re-infected *M. coucha* sera

Fig. 12.6 Reactivity of BmA-I with ALB treated and re-infected *M. coucha* sera

Fig. 12.7 Reactivity of BmA-II with ALB treated and re-infected *M. coucha* sera

Fig. 12.8 Reactivity of BmMf crude extract with ALB treated and re-infected *M. coucha* sera

Fig. 13.1 Electrophoretic migration of DNA of lymph node and spleen cells isolated from *M. coucha* harbouring different stages of *B. malayi* infection.