In vitro

1) The results demonstrated a significant increase in the activity of the enzyme in the experimental group compared to the control group. Aqueous extracts from the experimental group showed a higher catalytic activity than those from the control group. The difference was statistically significant (p < 0.05).

2) The proteinase inhibitory activity of the extracts was also evaluated in vitro. The extracts from the experimental group showed a greater inhibitory effect on the proteolytic enzyme activity than those from the control group. The difference was statistically significant (p < 0.05).

3) The antiparasitic activity of the extracts was assessed against a parasitic species. The extracts from the experimental group exhibited a higher level of inhibition against the parasites than those from the control group. The difference was statistically significant (p < 0.05).

4) A histopathological analysis of the tissue samples confirmed the inhibitory effects of the extracts on the parasitic infection. The extracts from the experimental group caused a significant reduction in the pathological changes compared to the control group. The difference was statistically significant (p < 0.05).

In vivo

1) The results showed a significant decrease in the parasitic burden in the experimental group compared to the control group. The difference was statistically significant (p < 0.05).

2) The proteinase inhibitory activity of the extracts in vivo was also evaluated. The extracts from the experimental group showed a greater inhibitory effect on the proteolytic enzyme activity in vivo than those from the control group. The difference was statistically significant (p < 0.05).

3) The antiparasitic activity of the extracts in vivo was assessed against a parasitic species in vivo. The extracts from the experimental group exhibited a higher level of inhibition against the parasites in vivo than those from the control group. The difference was statistically significant (p < 0.05).

4) A histopathological analysis of the tissue samples confirmed the inhibitory effects of the extracts on the parasitic infection in vivo. The extracts from the experimental group caused a significant reduction in the pathological changes compared to the control group in vivo. The difference was statistically significant (p < 0.05).