The pharmacological effects of a main alkaloid extracted from the medicinal plant, Dysoxylum cyrtotryum Miq., have been investigated on isolated whole mice stomach, rabbit jejunum and guinea pig ileum. The doses of 4.9×10^{-5} - 4.9×10^{-4} M., reduced spontaneous contraction of rabbit jejunum. Produced dose-dependent, non-specific inhibition of guinea pig ileum induced by acetylcholine, histamine and serotonin. Reduced contraction of isolated whole mice-stomach induced by barium chloride and also by calcium chloride in high-potassium depolarizing solution. These results could be suggested that the antispasmodic mechanism of the alkaloid is similar to papaverine but less potent than papaverine, or calcium antagonist like effect. Further pharmacological and toxicological studies would be a clinical valuable for antispasmodic.