Zerumbone: A Natural Compound with Anti-Cholinesterase Activity.

ABSTRACT

Herbal drugs could be a new source for inhibitors of acetyl cholinesterase (anti-AChE), the key enzyme in the breakdown of acetylcholine and a new talented approach for the cure of elderly neurologically associated disorders such as Alzheimer's disease (AD). Zerumbone (ZER) is sesquiterpene from the edible plant, Zingiber zerumbet which is known to posses tremendous biological activities. In this study, the inhibitory effect of ZER towards acetyl cholinesterase was evaluated using thin layer chromatography (TLC bioautography and compared concurrently to tacrine, as positive control. The results obtained in this research showed that ZER has an enzymolytic effect towards AChE. It could be suggested that ZER might be a potential candidate for the development of anti-AD treatment.

Keyword: Anti-cholinesterase drugs, Zerumbone, Zingiber zerumbet