

Dementia and Alzheimer's Disease

December 13-15, 2018 Abu Dhabi, UAE

* UHHQ OHD\ YHJHWSDFONHSP SOLANUM NIGRUM L DQG GANDM macrocarpon L
\$ PHOLRUDWH 6FRSRODPLQH LQGXFHG FRJQLWLYH DQG QHXUR

2SH\HPL %DEDWXQ GKHQGXQYGRIZX \$EBORPH)HODQ'G GDQ L^X 2ERK
Federal University of Technology, Nigeria

This study examined the modulatory effect Black nightshade (*Solanum. nigrum*) and African eggplant (*Solanum. macrocarpon*) leaves via a feeding trail on cognitive function, antioxidant status and activities of critical enzymes of monoaminergic and cholinergic systems of neurotransmission in scopolamine-administered rats. Cognitive impairment was induced in albino rats pretreated with dietary inclusions of Black nightshade (BN) and African eggplant (AE) leaves by single administration (i.p) of scopolamine (2 mg/kg body weight). Prior to termination of the trail, the rats were subjected to spontaneous alternation (Y-maze) test to assess their spatial working memory. In addition, activities of acetylcholinesterase (AChE), butyrylcholinesterase (BChE), monoamine oxidase (MAO), arginase and antioxidant enzymes (catalase, SOD and GST) of rat brain homogenate were determined. Also, the malondialdehyde (MDA), nitrite and GSH contents of the homogenate were determined. The results showed that pretreatment with dietary inclusions of AE and BN (5% and 10%) significantly reversed the impairment in the rats' spatial working memory induced by scopolamine. Similarly, elevations in activities of AChE, BChE and MAO induced by scopolamine were significantly reversed in rats pretreated with dietary

Notes: