Exploration of Therapeutic Efficacy of *Withania somnifera* and *Curcuma longa* In Alzheimer's disease - A Boon

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ABSTRACT: Alzheimer 's disease (AD) is an age related, irreversible neurodegenerative disease which is characterized by severe memory loss, unusual behavior, personality changes and a decline in cognitive function. The main pathological hallmark of AD is decreased level of acetylcholine (Ach) and increase amyloid beta (Aβ) plaque deposition, neurofibrillary tangle (NFT) formation and decrease brain-derived neurotrophic factor (BDNF) in hippocampus area of brain. Some ayurvedic medicinal plants are proved as a boon in the treatment of AD. Ayurvedic medicinal plants have been the single most productive source for the development of new drugs over already existing allopathic medicines. Indeed, several scientific studies have described the use of *Withania somnifera* and *Curcuma longa* as potential treatment for AD. Aqueous extract of this herb has been found to increase memory by increasing cholinergic activity, decreasing Aβ plaque deposition due to presence of withanamides. The active chemical constituents of Curcuma longa i.e.; curcumin reduces the amount of Aβ plaque deposition. This review summarizes the therapeutic efficacy of *Withania somnifera* and *Curcuma longa* in treatment of Alzheimer's Disease. © 2019 iGlobal Research and Publishing Foundation. All rights reserved.