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Phytopharmacology in Autism: A Review from the Perspective of Iranian Traditional Medicine

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ABSTRACT

In Iranian Traditional Medicine (ITM), autism spectrum disorder is conceptualized as a disturbance in cerebral temperament, leading to behavioral, cognitive, and social challenges. While no definitive cure exists, ITM historically employs medicinal plants as brain tonics and temperament correctors. This narrative review explores these plants and their proposed mechanisms of action from both traditional and modern scientific perspectives. The study synthesizes information from canonical ITM texts and contemporary scientific databases, including PubMed, Scopus, and Google Scholar. The findings identify several prominent plants, such as *Melissa officinalis*, *Crocus sativus*, and *Lavandula angustifolia*, traditionally used to alleviate symptoms associated with autism. According to the integrated analysis, these plants are believed to exert beneficial effects through multiple pathways, including enhancing memory and concentration, inducing calming effects, improving cerebral blood flow, and reducing neuroinflammation and anxiety. From the ITM viewpoint, their primary action is to restore the functional balance of the brain and mental faculties by modulating the body's innate heat and moisture. This review concludes that select medicinal plants from the ITM pharmacopeia present a complementary approach for managing autism symptoms. Their potential lies in a multi-target mechanism that aligns with both traditional principles and modern neurobiological understanding. However, the translation of this traditional knowledge into clinical practice necessitates rigorous, large-scale human trials to conclusively establish their efficacy and safety.

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