

THERAPEUTIC APPLICATIONS OF MEDICINAL PLANTS FOUND IN ODISHA, USED FOR THE TREATMENT OF CANCER

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ABSTRACTS

Medicinal herbs and their derivative phytoconstituents are being increasingly recognized as useful complementary treatments for cancer. Data was obtained from survey and it was found that some medicinal herbs like *Catharanthus roseus*, *Withania somnifera*, *Bacopa monnieri*, *Ocimum sanctum*, *Curcuma longa*, *Zingiber officinale*, *Allium sativum*, *Brassica oleracea* var. *botrytis*, *Brassica oleracea* var. *capitata*, *Daucus carota* are found in Odisha which were used for the treatment of cancer. *C. roseus* is an evergreen herbaceous plant contain alkaloids such as vinblastine, vincristine, vinorelbine, vinflunine inhibit spread of breast, ovary and lung cancer and also induce apoptosis. *W. somnifera* contain active

components like withaferin, withanolide, withanoside and withanone. Particularly withaferin found in this plant, inhibit breast cancer. Compounds such as bacopaside E and bacopaside VII extracted from *B. monnieri* have effects on cancer cells in malignant glioma and breast cancer. The main active compound of *C. longa* is curcumin which inhibit regrowth of cancer stem cells and shows best effects on breast and stomach cancer. *O. sanctum* has a range of beneficial compounds such as eugenol, rosmarinic acid, carnosic acid and apigenin inhibits the development of new tumors and induces cell death. *Z. officinale* contains a pungent compound such as 6-shogaol, zingerone and paradols provide chemopreventive activity which prevents and slows the progression of tumor growth. Arginine, oligosaccharides, flavonoids and selenium are extracted from *A. sativum* reduce risk of stomach, colon and breast cancer. *B. oleracea* var. *botrytis* contains fiber, vitamin B and C, carotenoids, glucosinolates, isothiocyanates promote the death of cancer cells while sparing