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The EtOH Extract of Nuts of *Psoralea corylifolia* L.-Induced Apoptosis in Human MCF-7 Cells through Modulation of the Bcl-2 Family Proteins and MAPK Pathway

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Psoralea corylifolia L. have long been used for treatments of symptoms of aging. Its ethanol extracts are proposed as food additives for processed food preservation. They possess anti-inflammatory, immunomodulatory and antiproliferative activities. In this study, the extract of the nuts of *psoralea corylifolia* L. were fractionated in EtOH. These extracts exhibited estrogenicity over the 17 β - estradiol and induced apoptosis in breast cancer cell demonstrated by Hoechst 33258 staining. These results were associated with up-regulation of anti-apoptotic protein Bcl-2 and pro-apoptotic protein Bax and Bad demonstrated by Western blotting. This is the first study to indicate that the nuts of *psoralea corylifolia* L. not only have estrogenic effect but also induce apoptosis in MCF-7 cell line. [This study was supported by technology Development Program for Agriculture and Forestry, Ministry of Agriculture and Forestry (203004-03-HD110).]

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