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Cytotoxic Activity of *Bombyx mori* and *Morus alba* Derived Materials against Human Tumor Cell Lines

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The cytotoxic activity of MeOH extracts of the freeze-dried silkworm (*Bombyx mori*)-derived materials (4th instar larvae, female and male pupae, virgin female and male adults), dried *Beauveria bassiana*-infected silkworm larvae, dried feces from the 4th instar larvae of *B. mori*, and dried mulberry (*Morus alba*)-derived materials (leaves, fruits, root barks) *in vitro* was evaluated by sulforhodamine B assay, using the five human solid A 549 lung, SK-OV-2 ovarian, SK-MEL-2 melanoma, XF-498 CNS and HCT-15 colon tumor cell lines. The responses varied with both cell line and material used. The 70% hot MeOH extract of *B. mori* feces (BFH) revealed potent cytotoxic activity against model tumor cell lines whereas moderate activity was observed from the vealed potent cytotoxic activity against model tumor cell lines whereas moderate activity was observed from the MeOH extract of *B. mori* feces *M. alba* root barks, and *M. alba* fruits. The other test materials were ineffective. Because of its potent cytotoxic activity, the activity of each solvent fraction from the BFH was detemined. Chlorofrom and ethyl acetate fractions showed the most potent cytotoxic activity. In conclusion, our results may be an indecation of at least one of the pharmacological actions of *B. mori* feces, *M. alba* root barks, and *M. alba* fruits.(Received December 2; accepted February 20)