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HERBCLIP

FILE: · Pine Cone (*Pinus nigra*)
· Lignins
· HIV

DATE: June 17, 1998

HC 041682

RE: **Pine Cone Compound Studied for Anti-HIV Activity**

Eberhardt, T.L. and R. Young. Assessment of the Anti-HIV Activity of a Pine Cone Isolate. *Planta Med.*, Vol. 62, 1996, pp. 63-65.

An isolated alkali-soluble isolate from *Pinus nigra* (pine cone) seed appears to possess anti-HIV activity. Researchers followed the protocol established by previous studies on *Pinus parviflora* seed for extraction, chemical identification, and verification of anti-HIV-1 activity.

Seeds were ground and extracted with methanol, ethanol water, and boiling water. The isolate appears to be composed of lignins that can be further broken down to yield a phenylpropanoid. *In vitro* screening of the isolate demonstrated a reversal of the cellular destruction caused by HIV-1 in infected lymphocytes.

Interest in pine cone extracts stems from a folk medicine treatment for gastric cancers. This treatment involves the ingestion of a hot-water extract of *P. parviflora*. Research suggests that the most active chemical constituents of pine cone seed are alkali-soluble and not readily extracted in water. —*Leela Devi, MSN, RN*

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