

NEWS

From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

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MARIJUANA 'TEA' MAY EASE

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GLAUCOMA WITHOUT SIDE EFFECTS

For Immediate Release

ATLANTA, GA....Two organic chemists at Georgia Tech may have found a wholly non-controversial way to use marijuana for treating glaucoma, the nation's second leading cause of blindness.

Drs. Howard Deutsch and Leon Zalkow have found that a water extract of marijuana dramatically lowers intraocular pressure in the eyes of test rabbits. Glaucoma raises intraocular pressure in humans and gradually impairs vision.

The extract, which Deutsch and Zalkow call a "marijuana tea," does not contain tetrahydrocannabinol (THC), the psycho-active substance in the plant.

Tests indicate that this extract works nearly twice as well in lowering intraocular pressure as does marijuana with THC. This finding has led the researchers to believe they are close to a major pharmaceutical discovery.

"This would be a very important contribution," says Zalkow. "All other drugs on the market now have undeniably serious side effects. So far, we have found none in this extract."

Enthusiasm about the two chemists' work isn't confined to their laboratory. The National Eye Institute recently awarded the scientists an almost \$500,000 grant to continue their research over the next five years.

Deutsch and Zalkow now are attempting to isolate the compound in their "tea" which relieves pressure in the eye.

(more)

"It's probable that the compound we're looking for is unknown," Deutsch says. "There're millions of compounds in nature and we find new ones with almost every plant material we examine."

Deutsch predicts the detection process will last from six months to a year.

Once they isolate the compound, the researchers must decide whether to extract it from the plant in natural form or to synthesize the substance in the laboratory.

A period of intensive experimentation with rabbits will follow this stage. Later, Deutsch and Zalkow expect that screening will be done with primates then with humans under the direction of Dr. Keith Green of Augusta.

Green, an expert in glaucoma research at the Medical College of Georgia, will provide medical and biological assistance throughout the research project. Green worked with the Tech chemists in their early experiments with rabbits. He has called those laboratory results the most dramatic he has ever seen.

Eventually, the researchers hope to develop a substance which can be converted into eye drops for commercial use.

Zalkow is a professor of chemistry whose research work centers on the application of natural chemical compounds for practical purposes. Deutsch is a research scientist who, like Zalkow, holds a Ph.D. in organic chemistry.

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