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By Keller

Chemist Tells DDT Hearing How Pesticide Is Detected

By Quincy Dadisman
Sentinel Staff Writer

Madison, Wis. — A chemist from the university of Wisconsin Alumni Foundation laboratory told a hearing on a proposal to ban DDT Tuesday how tests are made for the pesticide.

Francis B. Coon, the chief chemist for the laboratory, used a strip of gas chromatograph tape to explain methods used in analyzing a coho salmon from a creek in Michigan.

The fish, caught in Bear Creek, a Lake Michigan tributary, Sept. 14, 1968, was provided by the chemical firms which oppose the proposed ban to the use of DDT, he said.

Coon was called by Willard S. Stafford, chief counsel for the industry task force for DDT of the National Agricultural Chemicals association.

"False Peaks"

Coon said that chemists using the gas chromatograph had long been puzzled about "false peaks" which showed on the line traced on the graph by the indicator pen.

The instrument, used in analyses for minute quantities of a particular chemical in a sample, is sensitive enough in some cases to read to one part per billion in a sample, Coon said.

But he said some samples containing DDT showed "false

peaks" at the point where DDT should have been indicated on the graph.

Swedish and British scientists about two years ago traced the false peaks to PCB's, he said. PCB's is chemists' jargon for polychlorinated biphenyls.

PCB's are chemical compounds distantly related to DDT which are used as "plasticizers" in making tires, artificial rubber and various other materials, including lipstick and cutting oil, which is used extensively in machine shops to cool tool edges when cutting metals.

Techniques Worked Out

Coon said techniques had been worked out for separating the indicators for DDT related compounds and PCB's and showed how this was done in the sample coho salmon. He said it reduced the indication of DDT and one of its relatives, DDD by about 70%. The indicator for DDE, the compound into which much DDT is changed in living animals, was not affected by the PCB separation, he said.

Earlier, S. Goran Lofroth, a Swedish scientist, said that in his opinion "it is a shame" that no tests of the effects of DDT in human mothers' milk were not made in 1951 when it was first detected there.

Now, he said, "we don't have any controls. The whole earth is a test tube."

Lofroth repeated his argument that there should be a moratorium on the use of DDT until the changes it is known to produce in laboratory animals are evaluated as to the possible harm to human beings.

No Proof of Harm

He said that there was no positive proof that DDT was harmful but that there was proof that it causes these changes, particularly in inducing changes in liver enzyme

production, a phenomenon of which scientists had been unaware because they had concentrated their studies on its effects on nerve tissues.

Stafford and Victor J. Yannacone, jr., the attorney for the Citizens Natural Resource association and the Wisconsin chapter of the Izaak Walton league, the petitioners for the ban, engaged in several bitter exchanges over Lofroth's testimony.

Lofroth's trip to the United States was financed by the Environmental Defense Fund (EDF), a conservation minded group of which Yannacone is a member. But Robert McConnell, an assistant attorney general and the state's public intervenor, had called him as a witness.

Lofroth's testimony generally favored Yannacone's case and examiner Maurice van Susteren several times asked, "Whose witness is he?" Stafford argued from that base that Yannacone's questioning of Lofroth should be restricted to the rules for direct examination rather than the broader limits allowed in cross examination.

Lofroth returned to Sweden Tuesday night.

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