PCB's New Threat to Man?

By Bill Clede



NEW HAVEN — Polychlorinat biphenals may prove to be an entirely new threat to mankind — aggravating present problems of public concern over pollution, persistent pesticides and population explosion.

The long-term effects of this class of chemical compounds simply is not yet known. But they have been reported to be toxic.

They have been found in laboratory samples of fish and wildlife being tested for residues of chlorinated hydrocarbon pesticides such as DDT and dieldrin.

"Chemists using gas chromatography in these tests have reported unidentified peaks on their graphs as early as 1966," said Lloyd Keirstead, an analytical chemist at the Connecticut Agriculture Experiment Station here.

"One chemist, after testing samples of birds, simply called them avian substances."

The gas chromatograph is a sensitive laboratory instrument that produces a moving graph like a lie detector. Different substances cause peaks in the graph at different points.

These unidentified peaks came very near where persistent pesticides like DDT show on the graph. According to some experts, this interference could have caused some confusion in pesticide testing prior to 1968.

Since they were identified as polychlorinated opinion that they were introduced through 'natural' sources."

PCBs have many and varied industrial uses including the manufacture of plastics and electrical insulators. But they are not used as pesticides.

"As analytical techniques become more sophisticated, we find more and more materials in our fish, wildlife and waters," Keirstead added.

What this might mean in terms of pollution of our environment simply has not been determined.

The question will surely expand the scope of research, experts agree, but there won't be any quick and ready answers.

biphenals — PCBs for short — by a Swedish scientist, findings have been reported also in England, Holland and California.

New tests are under way now to determine the probable source of PCBs in fish samples tested at the Connecticut Agriculture Experiment Station.

New samples are being taken from waters previously tested. Some are being held in sterile glass bottles. Others are being wrapped in plastic bags as they were before.

"In all good conscience we want to make sure the finding of PCBs is not a matter of their being soaked up from the plastic," Keirstead explained. "Frankly, it's my

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