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AR/SB

6th November, 1967.

Dr. V.N. Hardy,
Monsanto Chemicals Ltd.,
Monsanto House,
10-18 Victoria Street,
London, S.W.1.

Dear Dr. Hardy,

I thank you for your letter of 3rd November, 1967, which indicates that we are both concerned with very similar problems.

I suggested that there was possible contamination of the river Witham because of the occurrence of the P.C.B's in the eggs of herons feeding on fish which come from the Witham Catchment area. More specifically the heronry is at Tumby Woodside, Lincs., some 10 miles from Boston. I suggest that water pollution may be responsible because the P.C.B's appear to occur to their largest extent in birds from an aquatic environment. We have no evidence of P.C.B. content in herons from elsewhere but we do find that some sea birds from the N.E. Coast also contain P.C.B's whilst on the N.W. and West Coast of Scotland they are absent.

In answer to your second point I would guess that there are several areas of pollution and the Scandinavian source is different from our own. I believe that the fact that the human in the United Kingdom contains very little would indicate that the source of pollution is of aquatic origin. If the atmosphere were polluted to any extent human fat would contain these compounds and from our own experience if they are present it is at very low concentrations indeed, possibly less than 0.1 ppm.

To answer your third point, particular chlorinated insecticides and/or their metabolites occur in almost every organism in the United Kingdom. The biphenyls are not so widely distributed, but like the chlorinated insecticides DDT and its metabolite DDE, and Dieldrin they reach their highest concentration in some aquatic birds where they may occur in equal or greater concentration than do the insecticides, I would say that the maximum concentration of P.C.B's that we find in wildlife is of the order of 10 to 20 ppm.

It is very difficult to assess the hazard of the P.C.B's but from the concentrations that we find and the reported LD_{50} it is unlikely that the residues of P.C.B. constitute a direct toxic hazard.

If it would be of any assistance for you to come and discuss this problem with us we would be very glad to see you.

Yours sincerely,

A. Richardson

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