

1993. ABSTRACT. No. P507, Page 251 in Society of Environmental Toxicology and Chemistry 14th Annual Meeting, Ecological Risk Assessment: Lessons Learned? (November 14-18, 1993, Houston, Texas)

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Dietary uniformity Analyses for Long-term Wildlife Hazards Studies: A Review and Approach. R.T. Sterner and M.J. Goodall, USDA, Denver, CO. Guidelines for quantifying the uniformity of dietary mixtures used during conduct of long-term avian toxicity studies are vague. Pesticide Assessment Guidelines (PAGS) and Standard Experimental Procedures (SEPS) require periodic monitoring of Test and Control Diets; however, no fixed limits for the reliability of mixes are set. Diets, vehicles, chemicals and analyses are study specific. This paper: (1) reviews guidelines from PAGS, SEPs and American Society for Testing and Materials (ASTM) relevant to dietary uniformity in long-term wildlife toxicity studies; (2) surveys the uniformity of diets attained in a representative set of published studies involving diverse chemicals; and (3) describes a dietary sampling/analysis strategy that offers an efficient approach to determinations of dietary uniformity. Key points include: SEPs cite prototype studies wherein highly stable chemicals and well documented/standardized analytical procedures are used. A review of scientific reports will be performed to empirically characterize the accuracy/precision of recoveries for formulated pesticides. During recent 20- and 22-week reproduction toxicity studies involving Mallard Ducks (*Anas platyrhynchos*) and Bobwhite Quail (*Colinus virginianus*), respectively, we sampled diets weekly but analyzed them monthly; if a "> 15%-of-nominal criterion" was exceeded, analyses of adjacent weeks' samples were triggered. This technique proved effective in documenting dietary uniformity.