DIETARY ANALYSIS IN GRANIVORES THROUGH THE USE OF NEUTRON ACTIVATION—*(Prepublished Abstract)* A technique is used which permits simultaneous tracing of several foods in the field without the use of radioactive isotopes. Seeds are tagged with different stable (nonradioactive) isotopes of rare elements and then distributed in the environment. Free-living rodents that have been exposed to these seeds are then trapped and their feces are collected. The relative amounts of the several tagged foods consumed by the rodents are determined by subjecting the feces to neutron activation analysis in the laboratory. In activation analysis stable isotopes are rendered radioactive by permitting them to capture neutrons in a nuclear reactor. The elements emit characteristic wave lengths of gamma radiation, allowing not only detection but precise quantification. The technique presents many technical problems, enough of which have been solved to allow its application to the investigation of some interesting ecological questions. (Ecology, 1974, 55(2):340-349; B. W. Smigel, State Univ. N.Y. at Albany, W. Jester, J. Blomgren, K. N. Prasad, Penn. State Univ. and L. Rosenzweig, Univ. of N. Mex.).

CONTRIBUTION TO THE ANALYSIS OF ENDOSYMBIOTIC CYCLE OF *EUSCELIS PLEBEJUS* F. (HEMIP., HOMOP., CICAD.) BY AN *IN VITRO* OBSERVATION TECHNIQUE *(In German)—*(Notice from Summary)* A new tissue cultivation technique is described for the analysis of the endosymbiotic developmental cycle of insects as exemplified by *Euscelis plebejus* F. The stages of the development of the host and their symbionts are analysed temporally, and documented by micrographs of the living *in vitro* material. For the first time enough data are available to allow the construction of a complete diagram of the temporal and morphological events occurring during the development of an insect host and its intracellular symbionts. During this investigation a new complementary symbiont (KRc) of *Euscelis* was isolated and described. This study has shown that the cells of the infectious mount of female a-organ originate from the ovary, that the final number of symbionts in the mycetocyte is due to phagocytosis and intracellular binary or multiple division, that the symbionts multiply *in vivo* only intracellularly, and that the infectious forms of the t-symbionts enter the hemolymph with migratory t-mycetocytes which then release the symbionts by lysis. (Biol. Zbl., 1973, 92(6):749-772; V. W. Schwemmler, Max-Planck-Institut, Univ. Freiburg, Germany).