Rutgers University entomologist, told conferees that there is a five-fold challenge ahead if the system is to fulfill its mission.

First, it will be increasingly necessary for individuals engaged in their own private researches to work together in interdisciplinary projects. Second, it is essential that research be kept relevant and that unnecessary projects be discarded. Third, competent young men must be brought into the field. Fourth, it will be necessary to establish and strengthen international educational programs. And, fifth, the challenge of environmental pollution will have to be met; calling this one of the great issues of our time, Dr. Wilson warned that action is needed now.

Panel Considers Ways To Enhance Herbicides

Of particular interest at this year's conference was a panel of three experts, who considered herbicide combinations, surfactants, and incorporation and irrigation as means of stimulating herbicide activity.

Dr. L. L. Danielson, USDA, Beltsville, Md., suggested that the main reasons for using herbicide combinations are to broaden the spectrum of control, to reduce amounts of herbicides, to cut costs and residues, and to make full use of available chemicals. What rates of each herbicide can be used in combination? What adjuvants should be used? What are crop tolerances to combinations (since these differ from tolerances to herbicides used singly)? More information is needed on how herbicides interact and how they affect plant metabolism before these questions can be fully answered, Danielson indicated.

"There hasn't been too much work in the area of herbicide-surfactant relationships," Dr. Ilnicki told the gathering. The question has been approached on a trial and error basis, and some information is gradually being collected. It is still difficult to know that a particular surfactant and herbicide will work well together, a problem under study at the New Jersey Experiment Station.

Industry Developments Debut

One of the new products developed for weed controllers is Velsicol Chemical Corp.'s OCS-21963, introduced at NEWCC by Velsicol's Dr. Gideon Berger. Primarily a preemergence killer of annual weeds and grasses, the chemical also controls some broad-leaved weeds. Velsicol hopes to have an experimental label by the end of 1967. Bluegrass turf has shown sufficient tolerance to OCS-21963 at rates up to 5 or 6 lbs. per acre to warrant further testing for turf use, weedicides were told.

A newly developed roadside sprayer designed for economical one-man operation was explained by Thomas McMahon, McMahon Brothers, Inc., Tena- fly, N.J. In operation, he said, the sprayer can cover up to 30 ft. from roadsides without drift, in winds up to 20 m.p.h. Development trails with the equipment, which features interchangeable spray arms, have covered a million miles of roadsides, according to McMahon.

Offering technical data on Diamond Alkali's recently introduced Dacagin spray gel was Dr. William Sprayberry. Intended for use with conventional spray equipment, Dacagin is a low viscosity liquid while being agitated or pumped, but a high viscosity liquid after passing through a nozzle, Sprayberry noted. The thickener can be used with water soluble materials, emulsifiable concentrates, and wettable powders.

Lee D. Greenwood, product engineer for FMC's John Bean Division, spoke on the adaptability of Bean's Rotocast sprayer to special needs of weed and brush controllers. Rotocast is an air sprayer attachment, which is usually truck-mounted but has also been used behind trailer-type sprayers. Air outlet is shaped to provide a proportioned column of air adaptable to both broadcast and spot spray needs, with a wide range of vertical and horizontal positions.

Shell is continuing its evaluation of SD-11831 (Planavin) and hopes to have registration in 1967, Dr. Jamie Wilson, Shell