Comments and Communications

Two New Organic Rhenium Compounds

Two new compounds not described in the literature have been prepared by reacting at room temperature potassium chlororhenite dissolved in 4 N hydrochloric acid with the hydrochlorides of diethylaniline and diethylamine.

The diethylaniline complex has a temperature of decomposition of 188° C. The crystals of this complex (dark green or microscopic light gray-green) are soluble in water and HCl but insoluble in absolute alcohol and in anhydrous ether.

The diethylamine complex has a temperature of decomposition of 210° C. The blue-green crystals of this complex are also soluble in water and in HCl but insoluble in absolute alcohol and in anhydrous ether.

$ReCl_4$ $[C_6H_5 \cdot N(C_2H_5)_2]_2 \cdot 2HCl$ contains	Re	N	Cl
	25.6	4.01	30.4
Found	27.0	4.04	30.7
$ReCl_4$ $[(C_2H_5)_2 \cdot NH]_2 \cdot 2HCl$	34.0	5.12	38.9
Found	34.4	5.16	38.7

Evidently the two compounds have the compositions indicated.

STEWART J. LLOYD and LEON F. KONIZ
University of Alabama

Statement Recommending the Establishment of an International Biological Control Organization

The following statement from P. Vayssiere, secretary-general of the International Union of Biological Sciences, has been transmitted to us by Stuart Mudd, of the University of Pennsylvania, secretary of the Union:

The entomologists, representing 10 nations, gathered at Stockholm for the purpose of a symposium on the scientific basis of an international organization for biological control, knowing that the promotion of world peace, international understanding, and the welfare of peoples is the aim of UNESCO and AFO, bring to the attention of these powerful international organizations the opportunity and urgent need to achieve this aim, in part, by providing facilities for the development of basic research on biological control which will lead to the greatly extended use of natural enemies to control insect pests and noxious weeds, so helping to conserve world food resources.

To strengthen this resolution, the members of the symposium draw attention to the following important considerations:

(1) A great loss of human food is caused by the depredations of insect pests and the competition of weeds. To ease the world shortage of food every effort must be made to reduce this loss to the lowest possible level.

(2) The use of insecticides has proved a powerful means of reducing loss. However, this method involves the continual expenditure of money and labor, and it has proved too expensive for use against the pests of many crops. Moreover, it is sometimes dangerous to man and domestic animals; and it may also directly damage the crops it is used to protect, or do so indirectly either by causing the accumulation of toxic substances in the soil or by destroying the natural enemies of the pests. A further disadvantage is that the intensive use of chemical methods of control frequently leads to the selection of a strain of the pest that is resistant to such control.

(3) The utilization of natural enemies for the control of insect pests and weeds is the most economical method once the natural enemies are established, for no further expenditure of money or labor is then required. Furthermore, it is the only practicable method when the cost of control by chemical methods is prohibitive and when available labor is insufficiently skilled or reliable to apply insecticides.

(4) It is clear that natural enemies could be used much more widely than they are at present, even though it is admitted that biological control cannot take the place of insecticides or herbicides for the control of every insect pest and weed. However, in their efforts to extend the field of biological control, entomologists are handicapped by their meager knowledge of the important natural enemies that exist in various parts of the world.

(5) To secure the necessary additional information some form of international organization is essential, for the biological control of insect pests and weeds in any one region is effected by introducing natural enemies from other regions. Consequently the information required by any one country can be obtained only by research in other countries; and therefore such research must necessarily be handicapped if organized on a national basis.

To deal with the situation outlined above, international action can and should begin at once, by setting up an organization providing the following services: (1) a documentation service for the collection of pertinent information from all possible sources, and its dissemination to all interested organizations and individuals; (2) a taxonomic service to deal with the identification of natural enemies; (3) a survey service to study the natural enemies existing in the major regions of interest; and (4) an application service, devoted to collecting, breeding, transporting, and acclimatizing natural enemies and establishing these in regions where the nations concerned are unable to undertake this work themselves.

It is considered that the personnel of the taxonomic service should be stationed at existing major centers of taxonomic investigations and that the documentation service should be associated with one of these groups of taxonomists. For the survey service, groups of investigators should be stationed at appropriate centers, where