

Letters

Iron Curtain Drops on Israeli Scientist

I planned to attend the 13th International Congress of Entomology which was held in Moscow 2-9 August 1968. All my arrangements were concluded and confirmed by the secretariat of the congress in Moscow last February. Later, however, just before the congress was to convene, my plans were completely ignored by the Soviet authorities as well as by the secretariat in Moscow. I received neither a Soviet visa nor any explanation. In fact, I did not receive any further correspondence or announcements. Even the intervention of Paul Freeman, secretary of the Permanent Committee of International Congresses of Entomology, did not help. My telegrams and letters to the Moscow congress and to Soviet authorities were unanswered (although in some cases the answer was prepaid by me). Furthermore, when I sent the manuscript of my paper (which had earlier been officially accepted by the congress) to an English participant to read in my absence, he was not allowed to do so. He was told that I was not a member of the congress, which was untrue since the secretariat had confirmed my registration, endorsed my registration fee, and accepted my paper 6 months earlier. My membership fee has not been returned to me. It should be added that no Israeli scientist received a Soviet visa to attend this international meeting.

It is clear that my experience represents political discrimination which involves not only the Soviet official authorities, but also some people responsible for the administration at the secretariat of the congress in Moscow. This discrimination appears to be carried out deliberately according to a plan. First, months before the opening of the congress, correspondence is answered and formalities appear to be arranged. Then, just before the congress convenes, when it is too late to take any drastic steps, the Israeli participant is simply ignored and excluded.

I would like to ask those scientists

who take part in decisions regarding the site of future international scientific meetings to oppose holding further meetings in the Soviet Union unless participation by Israeli scientists can be assured. Moreover, in view of the "method" described above, it is doubtful whether a promise given by individual Soviet scientists could be regarded as valid; although such promise might be given in good faith, it may prove useless unless supported by a statement from official Soviet authorities.

MEIR PAUL PENER

*Department of Entomology,
Hebrew University, Jerusalem, Israel*

Aquatic Harvests

Bardach presented a good, broad view of world aquacultural practices and potentialities ("Aquaculture," 13 Sept., p. 1098). . . . But the flourishing worldwide industries based on the production of kelp extracts, marine colloids, and other chemicals (which, incidentally, are frequently used as food additives), suggest areas of aquaculture not covered in the article. Although most structural polysaccharides of algae are indigestible by man, their widespread industrial application, the ever-growing commercial demand for such products, coupled with the scarcity of supply would certainly justify the evaluation of algae, especially the marine species, as products for aqua- or mariculture. Indeed, research and development programs are under way to "domesticate" such red algae as *Gracillaria* and *Suhria*, which are sources of agar-agar and Irish moss (*Chondrus*), from which carrageen is obtained.

Another important aspect of aquaculture is the collecting of lower aquatic life forms for their drug potentialities. Antibiosis is more widespread in marine organisms than in terrestrial species. Consequently, the seas offer a vast and relatively untapped source of antibiotics. One highly potent antibiotic, cephalothin, has already been success-

fully isolated. This is only the first of an array of promising drugs of marine origin currently under investigation. The organisms which produce these substances, however, will have to be intensively cultivated in order to generate enough raw material to make their utilization commercially feasible. Techniques to solve some of these problems (for instance, the growing of sea cucumbers for their toxins), are being investigated.

Bardach states that "paternity on the oyster bed is impossible to ascertain." This is indeed true of wild populations but does not hold for laboratory-raised larvae. Spawning in oysters can be induced by raising the water temperature; fertilization can easily be achieved between two selected specimens with the result that hatched larvae will exhibit more or less the desired characteristics. Larval food requirements are rather exact and somewhat difficult to satisfy but the impression given by the author that larvae need "flagellate algae for food" is probably too exclusive. Many other planktonic algae of the required size and lacking an indigestible (cellulose) cell-wall serve equally well. Good larval growth has even been achieved with some nonliving substitute food like corn flour. Investigations, in at least three different countries, are under way to find sources of nonliving, storable food for oysters and larvae in order to permit intensive cultivation in closed tanks—from fertilized eggs to marketable adults.

Though Bardach and this letter point out some of the many technical problems which remain, I feel there is a bright future for aquaculture as a source of food and other products needed by modern man.

CYRUS ADLER

*Offshore/Sea Development Corporation,
99 Nassau Street, New York 10038*

Vietnam: After Withdrawal

Jerome Wiesner is quoted as saying that "the Vietnam war is a mistake and that we should get out" (4 Oct., p. 104). Constant repetition of this statement serves to underscore its glaring defect. It should conclude: "We should get out and leave South Vietnam to the North Vietnam Communists." I know of no proponents of the above opinion who would deny that the second part follows the first as the night the day. Yet we hear the first part *ad*