oriented analysis can be is suggested by the essay on the legality of the hydrogen bomb tests in the Pacific. The authors conclude that really there is no relevant law other than the proposition that whatever is reasonable is legal. They then conclude that in the present world situation it would be unreasonable for the "proponents of the dignity of man" to write self-inhibiting meanings into international law.

We do not, however, regard it as a rational response for the free world unilaterally to disarm itself by the unnecessary extrapolation of broad prescriptions from the customary international law of the sea . . . (page 842).

If the limits of permissible national conduct are to be defined by such selfjudging criteria, I see little hope for international order. It is one thing to urge an organized national community, in which common values are widely shared, to construe its rules in the light of those values. It is another thing to tell the world community, a community whose members hold sharply conflicting views, that their conduct should not be governed by rules and that each nation should pursue its ends by whatever means seem reasonable to it. Such advice seems ill suited to the task of persuading governments that their enlightened self-interest lies in exercising restraint along lines which other governments may also be prepared to respect.

To be sure, McDougal himself does not wholly abandon rules and prescriptions. Often he argues like a lawyer, citing precedents and doctrine, not as guides to policy but as controlling authority. He repeatedly and explicitly recognizes the important policies of stability and order. But in the name of policy he suggests the explicit substitution of reasonableness for rules. He abandons the premise that rights and duties are governed by rules. To do so is to undercut the very foundations of fairness and order upon which the attainment of his policies depends. To accept his policy-science is all but to ignore the policy of having law.

## Principles, Not Expediency

The Political Foundations of International Law deserves a detailed review which space does not permit. Its authors, although acknowledging a large debt to McDougal, appreciate the importance of making the decisions according to principle rather than ad hoc expediency. They accept much of the wisdom of the policy-oriented analysis but broaden it to include and to emphasize, as one of the important policies to be considered, the policy of governing a nation's conduct by rule. They point out the advantages that follow if "the United States establishes clear principles governing its policies and demonstrates that it intends to follow those principles, regardless of what that decision costs in any individual instance . . ." (page 345). After an organized discussion of the relationship between international law and international politics they conclude:

States are not free to violate norms without real costs or, in many circumstances, without being coerced or penalized by other states that have interests in maintaining the norms. Thus, the sanctions of international law may stem either from international motivation or from external action. In either case, these sanctions are real. And in either case, the life of the state is a life governed, in part at least, by law, rather than merely by appetite (page 354).

One welcomes this book warmly. It deals explicitly and in an organized fashion with the critical question of international law, the relationship between norms and conduct. Although ·much of what is said is neither new nor startling, it needed to be said, and it invites further work in the area. In emphasizing the extent to which international law rests upon political foundations the authors perhaps underestimate the extent to which international politics rests upon law. Every political state is a legal structure. Every government and every army depends for its existence upon continued respect for the laws that hold the structure together, the internal rules about authority and obedience. Nations and the officials who run them recognize that their survival depends upon avoiding anarchy. For one reason or another they respect the legal rules that give them power. In this day of nuclear weapons, survival also depends upon avoiding international anarchy, upon respect for the rules which will lessen the chance of collision. We need not only an understanding of the political foundations of international law: we also need to understand the legal foundations of international politics.

## Mostly Plant Anatomy

Plants, Viruses, and Insects. Katherine Esau. Harvard University Press, Cambridge, Mass., 1961. 110 pp. Illus. \$3.75.

Katherine Esau is professor of botany and botanist in the Experiment Station at the University of California, Davis. She is well known for her studies on the anatomy of plants, especially that of the sugar beet and its interrelationship with the curly-top virus. The book is an expanded account of the 1960 John M. Prather lectures in biology at Harvard University, combined with material given at a colloquium and at seminars during this period.

There are seven chapters, the first giving a historical account of early investigations, especially those of Malpighi and Nehemiah Grew, into the movement of nutrient substances in plants. Chapters 2 to 4 deal with modern work on the movement of organic solutes in relation to structure and function of the sieve element. Chapter 5 discusses the conducting tissues in buds and growing roots. The last two chapters are concerned with the movement of viruses in plant tissues and with insects as feeders in the conducting tissues. The book is illustrated with 15 line drawings of plant tissues and there are 12 pages of photomicrographs. There is an index and a good bibliography.

The chapters on the translocation of food materials are well written and clearly explained, and the author gives a helpful concluding statement at the end of each chapter. This part of the book will be read with interest by plant anatomists and physiologists. The book, however, if we consider the title, is rather overweighted on the anatomical side; there are 73 pages devoted to this aspect and only nine and eight, respectively, to the last two chapters dealing with the translocation of virus and the feeding methods of insect vectors. The plant virologist may be a little disappointed at the rather meager treatment of the virological approach.

The format is good, the print is clear, and the reproductions of the photomicrographs of plant anatomy are excellent.

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