

After the new compound has been made you must develop analytical methods for identifying it and its intermediates.

If the compound shows promise as a pesticide you will probably require ounces or pounds of material for large greenhouse or small scale field tests. In such cases, a more efficient chemical process will likely be desired.

The types of chemicals studied will be largely decided by the company's supply position. Do they manufacture the likely intermediates or will they be dependent on rival companies for these? Needless to say, your best chance for success in this highly competitive business is to be basic in the products you sell.

Finally, after the candidate pesticide has been evaluated in the laboratory, the big question is to decide if it is good enough to send out for Field Development. With the increasing cost of Field Development no company can now afford to release mediocre compounds which may never pan out.

II. FIELD DEVELOPMENT OF PESTICIDES

Although the activities discussed here refer specifically to the American Cyanamid Company's Development Program, we feel they may be similar in many ways to programs of other basic pesticide producers who face similar problems.

Chart 6

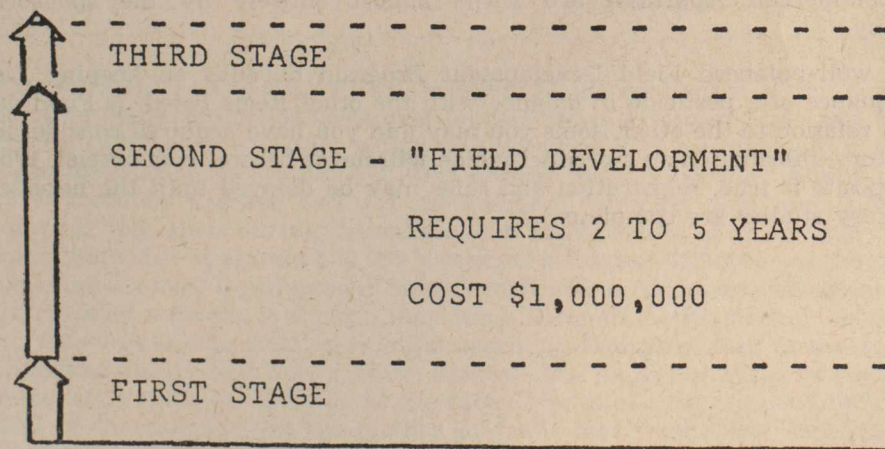


Chart 6—The field development of an Agricultural Pesticide, which we have likened to the second stage of a three stage rocket, may be the most costly and time consuming phase. The minimum time required for Field Development is two years for non-food crop uses and possibly five years or longer if the crop is to be eaten by man or animals. The average estimated minimum cost of this stage through the first food crop registration is around \$1,000,000. A wide spectrum pesticide like Malathion, which has been in commercial sales for twelve years is still requiring \$250,000 annually for continuing Field Development.