Agrochemicals are chemical agents that are applied to fields to boost the nutrient content of the soil or crops. Herbicides, fungicides, and insecticides are among them, as are synthetic fertilizers, hormones, and soil conditioners. They boost agricultural growth by eradicating pests that wreak havoc. They are used in horticulture, dairy farming, poultry farming, crop shifting, commercial planting, and other farming industries.

A pesticide is any substance that is used to kill, repel, or control pests in plants or animals. Insecticides are chemicals that are used to keep insects under control by killing them or stopping them from engaging in undesired or damaging behaviour. Their structure and mode of action are used to classify them. Fungicides are pesticides that kill or prevent fungus and their spores from growing. They can be used to manage plant-damaging fungi such as rusts, mildews, and blights. They could also be used to keep moulds and mildew at bay in other places. Herbicides are chemicals that are used to control or manage unwanted vegetation. Herbicides are most commonly used in row-crop farming, where they are treated before or during planting to increase crop productivity while reducing other vegetation. The global agrochemicals market estimated size is CAGR of 3.4%.

Increasing demand for food supply due to the rapid growth in the human population has triggered agricultural intensification. Agrochemicals are widely employed in agriculture to meet rising food demands, bridging the gap between food supply and consumption. Concurrently imbalanced use of agrochemicals, on the other hand, degrades the environment and poses serious threats to aquatic and terrestrial ecosystems. Chemical agents used in agricultural lands to increase nutrient shortage in the field or crop are known as agrochemicals. They also help to boost crop development by destroying hazardous insects. Agrochemicals increase the quantity and quality of agricultural goods. These are utilized in horticulture, dairy farming, cattle, grain farming, shifting cultivation, commercial plantation, and many other agricultural fields. The book covers a wide range of topics connected to Pesticides, Insecticides, Fungicides and Herbicides, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipments. A complete guide on Agrochemical Products manufacture and entrepreneurship. This book serves as a
one-stop shop for everything you need to know about the Pesticides, Insecticides, Fungicides and Herbicides manufacturing industry, which is ripe with opportunity for manufacturers, merchants, and entrepreneurs. This is the only book that covers Agrochemical in depth. From concept through equipment procurement, it is a veritable feast of how-to information.
Biofertilizers are seen as an important alternative technology, since the negative externalities of chemical fertilizers have become well known. The use of the latter has led to considerable environmental cost. Biofertilizers do not pollute the soil and do not disrupt the ecological balance, and hence are environment friendly. An increasing number of farmers are using biofertilizers, and the numbers of biofertilizer manufacturing units have also grown considerably. Organic farming system in India is not new and is being followed from ancient time. It is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrients to crops for increased sustainable production in an eco friendly pollution free environment. Organic farming has emerged as an important priority area globally in view of the growing demand for safe and healthy food and long term sustainability and concerns on environmental pollution associated with indiscriminate use of agrochemicals. Going organic may be a clear way of getting back to basics and getting away from the havoc chemicals can wreak on our health and our environment but the basics themselves may not be so clear. This book provides the view of immense potential of biofertilizers as a supplementary nutrient source for the crops and covers all major types of bacterial fertilizers. The major contents of this book is crop response to biofertilizers, nitrogen fixation, phosphate solubilising microorganisms, application and evaluation techniques, Bio Gas production, pest and disease management system in agriculture, production, promotion, quality control, marketing, future research planning, photographs and details of machineries, list of manufacturers and suppliers of biofertilizers and organic farming in directory section. This book will be of use and interest to consultants, researchers, libraries, entrepreneurs, manufacturers of biofertilizer and for those who wants to venture in to this field.
Biopesticides are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals. Agricultural pesticides, properly used, are essential in supplying the food requirements of the world ever growing population. The use of synthetic pesticides affects the health of human being. The indiscriminate use of pesticides has adversely affected the health of the soil. The residual pesticides in the soil not only affect the soil quality but also the water quality, as they get leached into the ground water. Due to these reasons, role of biopesticides are very important for sustainable agriculture. The use of biopesticides for sustainable agriculture is a complex issue that at times is difficult to comprehend and plan. Biopesticides are usually inherently less toxic than conventional pesticides. They generally affect only the target pest and closely related organisms, in contrast to broad spectrum, conventional pesticides that may affect organisms as different as birds, insects, and mammals. They often are effective in very small quantities and often decompose quickly, thereby resulting in lower exposures and largely avoiding the pollution problems caused by conventional pesticides. Biopesticides, key components of integrated pest management (IPM) programmes, are receiving much practical attention as a means to reduce the load of synthetic chemical products being used to control plant diseases. In most cropping systems, biological pesticides should not necessarily be viewed as wholesale replacements for chemical control of plant pests and diseases, but rather as a growing category of efficacious supplements that can be used as rotation agents to retard the onset of resistance to chemical pesticides and improve sustainability. In organic cropping systems, biopesticides can represent valuable tools that further supplement the rich collection of cultural practices that ensure against crop loss to diseases. Some of the examples of biopesticides are triazino benzimidazol, thiophene sar, pyrazoles, hydroxyacetophenones, benzoylphenylureas, thiadiazolo S triazine etc. It is observed that India occupies a comparatively better position in the arena of biopesticides; in terms of growth of usage, percentage share of the total pesticide market and also in research publications. The driving forces behind this progress are identified as huge research infrastructure (universities and bio control labs) and favourable public support system/policies. Subsequently, it delves on strategies to incorporate the promotion of biopesticides into rural development efforts like
recognition of the huge traditional knowledge base and use of biopesticides developed using indigenous technologies. Some of the fundamentals of the book are synthesis of triazino benzimidazol as 1 biopesticides, synthesis and pesticidal activities of thiaiazolo S triazine and imidazol, synthesis and antimicrobial activities of pyrazoles, effects of penconazole on plasma membrane, metabolism of diclofop methyl, bleaching herbicides stimulate maize HMGR activity, soil transformation of acetochlor, propanil degrading amidase activity, inhibition of BTX B binding by RH 3421, KDR type resistance in German cockroach etc. This is the first book of its kind which provides different parameters about biopesticides. The book will not only be resourceful for new entrepreneurs but will also help the technocrats, research scholars and those who willing to know more about biopesticides.
A man entering an industry soon finds that most of the products manufactured by his company are not synthetic or definite chemical compounds, but are mixtures, blends or highly complex compounds of which he knows little or nothing. The literature in this field, if any, may be meager, scattered or antiquated. Formulation is a key process in the overall life cycle so that products are delivered that is of the right quality, at a competitive cost, and is made available within the specified time scale. A formula is an entity constructed using the symbols and formation rules of a given logical language. In science, a specific formula is a concise way of expressing information symbolically as in a mathematical or chemical formula. The chemical formula identifies each constituent element by its chemical symbol and indicates the number of atoms of each element found in each discrete molecule of that compound. If a molecule contains more than one atom of a particular element, this quantity is indicated using a subscript after the chemical symbol and also can be combined by more chemical elements. It is all in the formula, whose implications also remain undiscovered by modern economists. It plays a major role in every process whether it is manufacturing process or preservation. There is a big importance of formula in our life because formulas and equations deal with everyday things like shapes, investments, mixing things, movement, lighting, travel and a host of other things they provide information you can use in planning activities. This book basically deals with the extracting oil from cottonseed, silver nitrate test for cottonseed oil, solid linseed oil, decolorizing or bleaching linseed oil, linseed oil for varnish making, refining linseed oil, mineral oil, leather stuffing grease, leather adhesion grease, liquid belting lubricant, belt adhesion compounds, belt preserving grease, government harness dressing, rubber belt dressing (non static), wire drawing lubricant, wire drawing composition, metal drawing lubricant, cold drawing metal lubricant, drawing compound for aluminum, brass drawing lubricating emulsion, sheet steel drawing lubricant, non seizing threads and gaskets, machine tool lubricant, slushing oil for metal protection horse shoe grease etc. This book is an invaluable resource of the formulae of petroleum, lubricants, fats, polishes, glass, ceramics, nitrogenous fertilizers, emulsions, leather and insecticides. This book present
several hundred advanced product formulations for household, industrial and other applications. The purpose of publishing this book is very useful for chemists, entrepreneurs, existing units, technocrats and engineering students.
Directory / Database of Corporate/Leading Companies in Indian Pesticides, Insecticides & Fungicides Products (with Financial Figures) 4th Edition

Format: CD-Rom
Book Code: NID139
Price: Rs. 3,894.00  US$ 150.00
Contains: 181 records with following information: Name of Company, Address, City, Pin Code, Phone, Fax, Email (136), Website (89). Name of Directors, Energy Type & Consumption, Location of Plants, Project Capacity, Production, List of Major Raw Materials, Name of Products, Turnover, Capital Expenditure Projects (Capex).
Note: All Records does not contain all fields of information. However, maximum information has been incorporated.
Format: MS Excel

Manufacture of Biofertilizer and Organic Farming
With the introduction of green revolution technologies, the modern agriculture is getting more and more dependent upon the steady supply of synthetic inputs. Intensive agriculture with the use of chemical fertilizers in large amount has, no doubt, resulted in manifold increase in the productivity of farm commodities but the adverse effect of these chemicals are clearly visible on soil structure, micro flora, quality of water, food and fodder. At this critical juncture, biofertilizers are useful supplement to chemical fertilizers. Organic farming has emerged as the only answer to bring sustainability to agriculture and environment. Biofertilizers is also an ideal for practicing organic farming. Biofertilizers are the most advanced biotechnology necessary to support developing organic Agriculture, sustainable agriculture, green agriculture and non-pollution agriculture. Bio Fertilizer are natural and organic fertilizer that helps to keep in the soil with all the nutrients and live microorganisms required for the benefits of the plants. Today product like biofertilizers using the biotechnology techniques have proved that biological control is widely regarded as a desirable technique for controlling insects and pests, due to its minimal environmental impact and its avoidance of problems of resistance in the vectors and agricultural pests. The increasing demand for biofertilizers and the awareness among farmers and planters in the use of biofertilizers have paved way for the fertilizer manufacturers and new entrepreneurs to get into biofertilizers production. It is one of the important components of integrated nutrient management, as they are cost effective and renewable source of plant nutrients to supplement the chemical fertilizers for sustainable agriculture. This book gives a detailed process on manufacture of biofertilizers & organic farming. It contains chapters on biofertilizers, role of biofertilizer in crop production, production and distribution of biofertilizer, organic farming, method of organic farming, weed and pest management, and many more. This book will be very helpful to soil scientists, microbiologists, biologists, students, new entrepreneurs, fertilizer industry, organization engaged in biofertilizers production, training centres and to all those interested in the efficient use and recycling of wastes, resource management and sustainable farming.
Directory / Database of Corporate/Leading Companies in Indian Fertilizer Industries (Chemical and Bio) with Financial Figures (7th Edition) [.xlsx, excel format]

Format: CD-Rom
Book Code: NID176
Price: Rs. 6,608.00  US$ 225.00

Products:
- NITROGENOUS FERTILIZERS: Ammonium Chloride, Ammonium Sulphate, Sodium Nitrate, Calcium Cynamide, Calcium Nitrate, Magnesium Nitrate, Nitrogenous Straight Fertilizers
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- MIXED FERTILIZERS: Diammonium Phosphate, Ammonium Phosphate, Ammonium Phosphate Sulphate, Nitrophosphate, NPK Mixed Fertilizers, Other Mixed Fertilizers

Contains: 255 records with following Information: Name of Company, Address, City, Pin Code, Phone, Fax, Email (206), Website (108), Name of Directors, Location of Plants, Project Capacity, Production, List of Major Raw Materials, Name of Products, Turnover, Major Raw Materials with their consumption quantity & Raw material value, credit ratings. Financial Comparison amongst companies assets, Net worth, Cash flow, Cost as % of sales, Raw material turnover, Selling & distribution expenses, growth of assets, liabilities Income & expenditure, Liquidity Ratios, Profitability Ratio, Profits, Return Ratios, Structure of Assets & Liabilities (%), Working Capital & Turnover Ratios) (*Wherever available) Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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