

declined dramatically by 1983. After the low number of publications in 1983, there is a smaller increase in publications peaking in 1990. However, the number of publications is less than 50% of the total in 1978. This pattern is evident in both databases. Similar patterns of Iranian publications in the time period under study were found in the three other major databases used in this study: BIOSIS, Medline and CAB Abstracts.

These results give an overview of all Iranian publications in major scientific databases used in this study. Clearly, there will be research included in these databases that is not at all pertinent to questions that this study is examining. Therefore, it is important to select and survey publications that have been chosen by the key-words that establish more direct relevance to biological and toxin research programs.

3.2 Key Word Selected Iranian Publications

From all identified Iranian publications in all databases, research was selected on the basis of key-words described in section 2.6. The objective was to select research containing key words describing research in key subject areas dealing with recombinant DNA, viruses, bacteria, toxins, peptides, bioregulators and other key areas of biological research.

Figure 2 shows the time course of 672 publications from Iran that were selected on the basis of key-words. These publications formed a unique set of database records which were the basis for this study's analyses. The pattern of published research shows a low output on selected topics from 1970 to 1972. There were fewer than 10 publications per year. It was only in 1973 that the output from Iranian laboratories started to increase. In 1978 the number of publications peaked at 80. After that year, the number of publications declined