

USE OF 'TAXIR' AT PLANT INTRODUCTION STATION, PULLMAN, WA

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TAXIR is an acronym meaning TAXonomic Information Retrieval. It is an electronic computer oriented information storage and retrieval system. The system is based on set theory such that information is retrieved by calculation rather than by comparison. The language of TAXIR is Fortran IV which is a common computer language and enables the user to have complete control over building, updating and querying data banks. This language takes the form of Boolean algebra when used in information retrieval whereby the Boolean operators AND, OR and NOT are used with operands of the users choosing in Boolean expressions. Since computers are designed at the circuitry level with the help of Boolean algebra, they operate the TAXIR system with extreme speed and efficiency.

The bean data bank is built using the various characteristics of the growing plant as descriptors and the classification of each characteristic as a descriptor state. These are retrieved in the form of a control vocabulary and as such, form the operands in the Boolean expressions defining the query.

Such queries take the following form:

1. HOW MANY noise $\left\{ \begin{array}{l} \text{WITH} \\ \text{HAVE} \end{array} \right\}$ Boolean expression*
 i.e., HOW MANY ITEMS HAVE PLANT TYPE, B* or HOW MANY ITEMS HAVE PLANT TYPE, B OR SV AND FLOWER COLOR, W AND POD CROSS SECTION, FROM 1 TO 3 AND NOT SEED COLOR, MX AND MATURITY, E OR M*
2. PRINT noise: descriptor list FOR noise $\left\{ \begin{array}{l} \text{WITH} \\ \text{HAVE} \end{array} \right\}$ Boolean expression*
 i.e., PRINT: ACCESSION NO. FOR ITEMS WITH PLANT TYPE, B*

The noise can consist of nothing (leave it blank) or any character string except :, WITH, or HAVE. Noise is ignored by TAXIR. Its purpose is to improve readability of the statement not for the machine but for humans. Noise may be omitted but the noise terminator :, WITH, or HAVE must be used. The asterisk merely terminates a TAXIR Statement.