

COMPUTER SOFTWARE REVIEWS

BioAlmanac [CD-ROM]¹

Dana L. Roth

Caltech 1-32, Pasadena, California 91125

Received September 8, 1994

The BioAlmanac ("your protein reference library on a disk") is a CD-ROM product that allows users to retrieve a wide variety of biochemical information about proteins—both purification and characterization data. By integrating the Protein Biochemical and Purification Database (PBPD) with the Protein Identification Resource (PIR) and Swiss-Prot protein sequence databases and the GenBank genetic sequence database, BioAlmanac has produced a unique and potentially useful product.

The minimum requirements are as follows: IBM XT-class computer, Monochrome monitor, 512 Kb RAM memory, MS-DOS—Version 2.0 or higher, and MS-DOS CD-ROM Extensions-compatible CD-ROM (ISO 9660 format) drive with cables and interface. However, for a better response time and easier searching, the publishers recommend the following upgrades: IBM AT-class computer with mouse, VGA color monitor, 640 Kb RAM memory, and MS-DOS—Version 3.0 or higher.

Searching (without a mouse) requires learning a set of keyboard commands (that are not intuitively obvious) or using arrow keys and pull down menus. Hypersearching (searching on user highlighted text terms) is offered, along with Boolean "and/or/not", saving strategies, sorting results, and marking text or fields for downloading or printing.

While comprised of four component databases, BioAlmanac has created common indexes for overlapping data (e.g., author names, words, etc.). The PBPD record includes the following: protein characteristics (e.g., molecular weights, compositions, variants, etc.), protein purification data, as-

sociated organisms, and biological function/activities. Nomenclature and taxonomy generally follow standard sources (e.g., 1992 E.C. number recommendations).

In addition to the obvious retrievals (e.g., using search terms such as author or protein names), BioAlmanac also allows the following: range searching on Mw and pI (with Boolean "anding" of the results), identifying proteins produced by specific genes or related to specific diseases, and protein purifications that use specific equipment (e.g., antibody columns).

As potentially useful as this product may be, it requires a quarterly subscription to maintain currency and in a library setting may be a metaphor for many existing reference works. The ability of researchers to directly access Medline, CAS-Online, and the NCBI for biochemical and sequence data is not an insignificant limitation on the usefulness of BioAlmanac, especially when coupled with the necessity of learning yet another set of search protocols.

However, for research groups routinely requiring the ability to search for proteins using unique combinations of physical properties or to locate suitable protein purification techniques, it could be invaluable.

REFERENCES AND NOTES

- (1) BioAlmanac, Blue Lightning Data & Software, Inc., 19 East Central Avenue, Paoli, PA 19301. Telephone 1-800-447-3769. The current annual price with quarterly updates is \$599.

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