

## Citation web-crawler, *Google Scholar*

In November 2004, *Google* had unveiled its sister web-crawler, *Google Scholar (GS)*<sup>1</sup>, specially for scholarly literature. It enables users to search papers, theses, books, pre-prints, abstracts and technical reports from all broad areas of research. It has been developed by Indian-born computer scientist Anurag Acharya<sup>2</sup>, who was on the faculty at the University of California, Santa Barbara before he joined the company in 2000. The exciting feature of *GS* is 'cited by' indexing of citations to the scholarly search query within its coverage. The hits are arranged with most cited items in the top. As it provides links to publishers' content, a user can access permissible full text of scholarly search results. Another feature is 'web search' which indexes the general web-based information relating to query

item. Due to more experience and low coverage of journals from developing and underdeveloped countries in popularly known citation databases, such as Thomson ISI's *Science Citation Index* or its web version *ISI web of science* and Elsevier's *Scopus*, it may be a revolutionary open-access search tool for retrieval of citation. Now it is a young beta version, more innovations to be introduced. I have used *GS* advanced scholar search and generally using standard abbreviated title of journal retrieves more reliable refined results. Search coverage needs to be widened for support to scholars, publishers and libraries<sup>3</sup>. Publishers may index their scholarly content (full text/abstract) through *Google* and *GS* to enhance the visibility and accessibility of their publications. Libraries can

make it easier for their patrons to access the electronic and print resources by *GS* link resolver. This special web-crawler from *Google* may help its target users find relevant scholarly information.

1. <http://scholar.google.com>
2. Butler, D., *Nature*, 2004, **432**, 423.
3. <http://scholar.google.com/scholar/help.html>.

JITENDRA NARAYAN DASH

*Library and Documentation Services,  
National Institute of Immunology,  
Aruna Asaf Ali Marg,  
New Delhi 110 067, India  
e-mail: jn\_dash@yahoo.co.in*

## Hair sheep

Hair sheep are a breed of sheep that have hair instead of wool as their coats. Their hair coats are similar to those of cattle, goats and horses. Among India's sixty-two million sheep (2003), approximately one-quarter is hair sheep. In South India there are about eight breeds of hair sheep, which constitute half the population in the southern region.

Hair sheep are better adapted to tropical conditions and are found all over the world

in tropical climates<sup>1</sup>. They are more fertile and have higher survival ability at all ages than wool sheep under these conditions<sup>2</sup>. Not only are they good producers of meat, but also their skins are of better quality than those of wool sheep<sup>3</sup>.

Over the past fifty years, all efforts at sheep improvement in India have been concentrated on wool sheep. This is in spite of the fact that the income of the sheep-rearer from sale of wool is only 2% of the income from sheep. Usually the price of wool does not even cover the cost of shearing. In spite of considerable efforts at wool sheep improvement, there has been no noticeable increase in either the quality or the quantity of wool produced. In fact, there have been efforts to spoil hair sheep breeds by crossing them with imported wool sheep breeds like the Rambouillet. It is hoped that a policy change will soon occur in India, where research efforts will be diverted towards hair sheep and away from wool sheep. South Indian research institutions should be supported with this objective.

1. Figueiredo, E. A. P., Shelton, M. and Barbieri, M. E., In *Hair Sheep Production in Tropical and Sub-tropical Regions. With Reference to Northeast Brazil and the Countries of the Caribbean, Central America, and South America* (eds Shelton, M. and Figueiredo, E. A. P.), University of California, Berkeley, USA, 1990, pp. 7–23.
2. Ponzoni, R. W., Report, Food and Agriculture Organization of the United Nations, Rome, 1992.
3. Bradford, G. E. and Fitzhugh, H. A., In *Hair Sheep of Western Africa and the Americas. A Genetic Resource for the Tropics* (eds Fitzhugh, H. A. and Bradford, G. E.), Westview Press, Boulder, Colorado, USA, 1983, pp. 3–22.

B. V. NIMBKAR

*Maharashtra Goat and Sheep Research,  
and Development Institute,  
P.O. Box 23,  
Phaltan 415 523, India  
e-mail: nimsheep@sancharnet.in*



**Figure 1.** Madgyal Rams.