

# Evaluation of the Advance Booking Scheme Launched By Pioneer Hi-Bred International Seeds

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## ABSTRACT

*The major issues for a retailer to bet his money on any particular brand in the form of advance booking may vary from the attractiveness of scheme to the feedback of farmers regarding performance of the brand in the previous year. The fact, that it also acts as a competition safeguard for the retailers against shortage of stock so as to retain the existing customers, and the reputation of their respective counter as well, also cannot be overlooked.*

*Of the many innovative ideas, some of the most recent are ensuring the reach of company personnel to every nook-and-corner of the villages and making the availability of Advance Booking Scheme (ABS) brochures in the most common used language of North India, Hindi which have definitely proved its edge in the market owing to which one of the territories of Uttar Pradesh, covering the districts of Bahraich, Gonda, Shravasti and Balrampur recorded a landmark booking.*

*Pioneer Hi-Bred International Seeds (PHI Seeds') Sales and Marketing teams continuously keep a watch and come up with new below-the-line (BTL) activities for giving focused attention to the prevailing market conditions. This study aims at evaluating the Advance Booking Scheme (ABS) launched by Pioneer Seeds with its competitors & linkage to sales estimation using historical data on ABS conversion by retailers in various districts of Uttar Pradesh.*

## Introduction

In today's complex and competitive agricultural environment, superior research is essential to achieve crop improvements which require long-term commitment, investment, innovation and dedication. All this gave birth to the development of hybrid varieties of crops. Rice occupies an area of 44 million hectares in the country. It includes the seven million hectares whose soil is saline, alkaline, saline-alkaline or flood-prone, only 25 per cent of the rice acreage in the country has assured irrigation.

Hybrid conversion is becoming more prevalent in India. Less than 2 percent of the 44 million hectares

of rice planted in India each year are hybrid. The 15 to 20 percent yield advantage with hybrid rice is driving conversion. Among the many approaches involving rice-variety improvement which are being explored to break the rice yield barrier, hybrid-rice technology appears to be the most feasible and readily adoptable.

The agrarian economy of Uttar Pradesh continues to grapple with low productivity and lack of proper infrastructure and forward industry linkages. Unlike Punjab and Haryana, the mechanization of the agricultural sector has been slow in UP. Shrinking size of land holdings (over 75 per cent of land holdings are less than one hectare) is partly to blame for low

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productivity. In this area majority of the farmers are small and medium size therefore they can't infuse more money as input for crop production, so at this stage only alternative left for farmers is hybrid paddy seed as these hybrid paddy varieties are more responsive even in case of applying low inputs.

In Northern India, Uttar Pradesh is the market with immense potential for hybrid seeds and where every agribusiness company faces stiff competition due to numerous players. The recent study supports the fact that there is a gradual drift in the proportion of farmers seeking a brand by name as compared to those following the retailers' advice owing to increasing level of extension activities from company's side which in turn leads to enhancement of awareness level amongst the farmers.

Apart from these key issues, the biggest threat to the retailers at this point of time is the much talked about subsidy regarding hybrid paddy seeds. The season for paddy seeds sale may vary from a week to a fortnight and if the subsidy be offered in the accurate time frame, retailers' position would really be threatened.

Pioneer Hi-bred International Seeds Ltd. is one of the major players in this market with an intention to serve the farmers as per their needs. They are operating in a big way to keep hold of this business and in order to do so; they wanted to estimate the success rate of Advance Booking Scheme in Uttar Pradesh. . Launching Free Good Scheme (FGO) as an incentive to the ABS is one such BTL schemes and has been quite successful in its attempt of extracting majority of funds from the market.

Hence, this study was undertaken with the objective i.e., to evaluate Advance Booking Scheme (ABS) launched by Pioneer Seeds with its competitors & linkage to sales estimation using historical data on ABS conversion by retailers in various districts of Uttar Pradesh.

#### Research Methodology

Descriptive research design was undertaken for the study considering the scope and nature of study. Data related to this study was collected from written

sources (i.e. trade publications), company database and the Internet for latest up date in the seed industry. The primary data related to this study was collected through interviews of seed retailers and company personnel. From the state of Uttar Pradesh, four districts namely, Bahraich, Balrampur, Gonda and Shravasti were selected as advised by the company personnel. The reason behind selecting these districts was to study booking pattern this year. These four districts constitute a territory as defined by the company.

Both judgmental and purposive sampling methods were adopted to carry out the study. Purposive sampling was used based on the retailers involved in Advance Booking of PHI Seeds this year. Judgmental sampling was used to map retailers in the given districts based on the location. All the distributors of the territory were visited to gauge bookings in their respective locations. The sample size constituted of one hundred seed retailers and six distributors. The data was collected through structured questionnaire and observations were made regarding the Advance Booking Scheme and its impact on retailers. The survey was conducted for a span of eight weeks starting from February 24 to April 20, 2007.

#### Data Analysis

The collected data was classified, tabulated and coded. Based on the responses and the information collected from retailers, appropriate statistical techniques like Pareto analysis, pie charts etc. were used and inferences were made. The purchase intention was determined using correlation analysis on the data sets obtained from retailers in the way given below:

#### Formula Used

$CORREL(array1,array2)$

Array1 is Booked Quantity or ABS and is the independent range of data.

Array2 is sale which is the dependent range of data.

The formula cited above is applied to calculate correlation with the help of MS Excel Sheet.

The equation for CORREL is represented by following equation:

$$\frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

where *n* is the number of observations

*x* is the independent observation i.e., booked quantity or ABS.

*y* is the dependent observation, i.e., sales.

The above formula may be used for manual analysis in designing some correlation model.

### Review of Literature

Bellantuono et al. (2006)<sup>1</sup> presented a model in which the supply chain partners participated in a program where the retailer offered an advance booking discount (ABD) program to the customers. The ABD program is intended to use price discount to entice customers to pre-commit their orders. Besides demand increases, the ABD program allows the retailer to use the pre-committed orders to develop more accurate forecasts.

Manninga et al. (2007)<sup>2</sup> mentioned that consumers often encounter multiple unit price promotions whereby a price reduction is presented as a reduced total price for multiple units of the same item (e.g., an item regularly priced at \$1.25 each is promoted as “5 for \$5”). In a series of experiments, it is found that the positive effect of these promotions on quantity purchase intentions is contingent on the magnitude of the quantity specified in the offer and the rate of product consumption. However, offer effectiveness is not influenced by highlighting single unit prices, the unrestricted nature of these promotions, or aggregate savings. As predicted by the selective accessibility explanation, the effect of multiple unit price promotions on quantity purchase intentions is shown to be mediated by accessing anchor-consistent knowledge.

### Results And Discussions

It is explicitly clear from exhibit 1 that assurance of delivery of quantity, which happens to be a safeguard against competition in the market and shortage in the quantity due to seasonal demand,

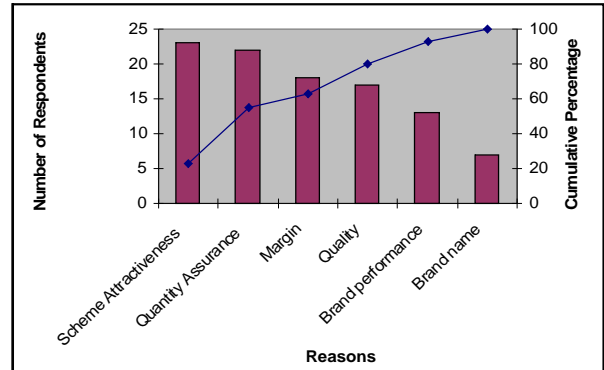


Exhibit 1: Pareto Chart based on reason for having advance booking done

is a significant factor for the success of ABS. This is closely followed by factors like margin and quality. Brand performance and brand name however, were adjudged as trivial factors.

The proportion of retailers having the catalogue or the written scheme regarding Pioneer's ABS has been depicted in Exhibit 2.

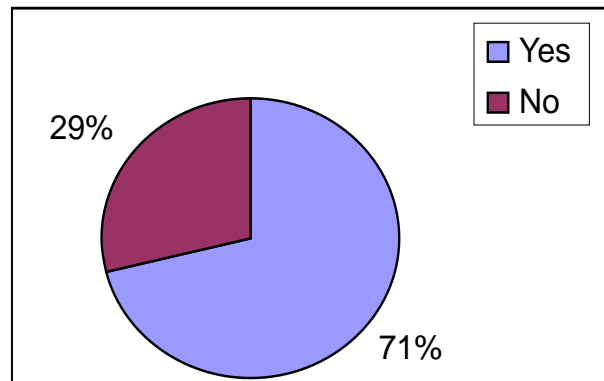


Exhibit 2: Retailers having written scheme in the sample population

Pioneer's ABS document had an edge over the other companies' Advance Booking documents for the reasons that it was published in Hindi; thus making itself clearer and therefore, ensured a better reach to the retailers. An interesting observation made was that almost all companies, be it a multinational or an indigenous had their brochure in English.

A good segment of retailers got involved in Pioneer's ABS without even having any document involved. When inquired about the genuineness of their booking status, they presented the copy of demand

draft submitted for the booking. This shows that they count upon the field staff as far as the terms and conditions are concerned.

When the retailers were inquired about the key features of PHI ABS, as per Exhibit 3, a colossal 80 percent responded by saying that it's the free good offer, that makes PHI's ABS different and rewarding from other companies' ABS.

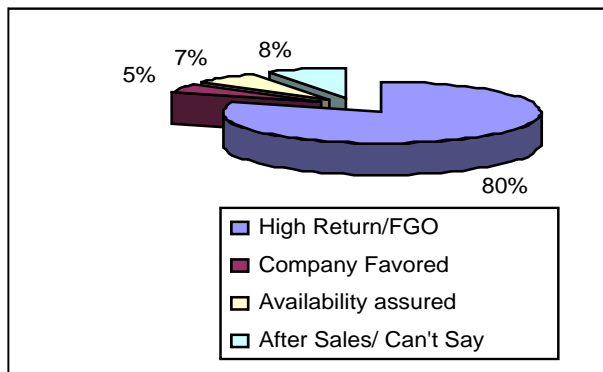


Exhibit 3: Key features of PHI ABS as per the retailers in the sample population

Few retailers believed that the ABS can be judged only after the sales are over and almost the same number of respondents adjudged the assurance of timely availability of PHI as the key feature of ABS.

Normally, the token incentive offered per Kilogram (Kg) ranges from Rs. 3.50 (for a brand like Bayer Crop Science's) to Rs. 12 for a local player like Mahi. PHI Seeds have taken the innovative step of offering free good (15 Kg for every 420 Kg booked). The retailers are quick enough to calculate that if the rate for this year be considered as an approximate of previous year's rate, i.e. Rs. 180 per Kg; it would yield a profit of Rs. 2700 for 15 Kg. when this 2700 be divided by the 420 kg booked, it would be around Rs 6.43 per Kg.

When asked to rate the PHI ABS more precisely by the retailers, as evident from exhibit 4, 33 percent of them awarded full 5 points, whereas 27 percent awarded 4 points to the scheme. Here, again, it is quite evident that 60 percent of retailers are satisfied with the scheme. Around 20 percent have rated the scheme at 3 points out of 5, closely followed

by 13 percent who believes that the scheme deserves 2 points on a scale of 5.

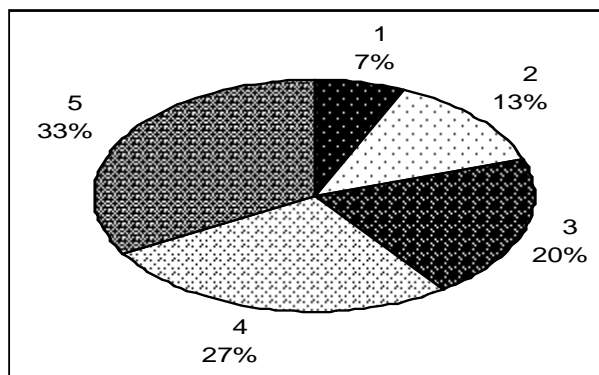


Exhibit 4: Rating awarded by retailers regarding PHI ABS in the sample population

Exhibit 5 clearly depicts that the conversion of ABS into sales is the prime factor of past performance.

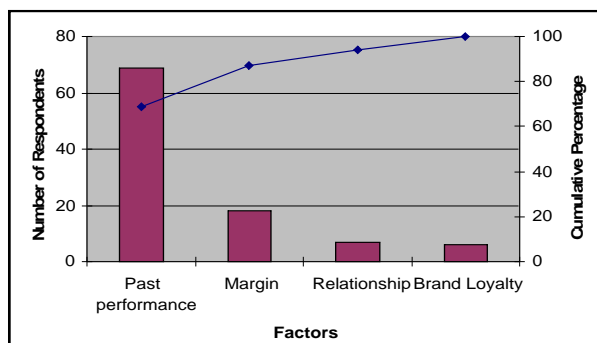


Exhibit 5: Pareto Chart based on the factors which controls advance booking to sales

This factor accounts for 75 percent credence of all the factors. The next factor being margin received on a brand. The reason being is simply the risk aversiveness of Indian farmers who believe that once the product has fared well in one season would definitely prove good enough for the next year as well. Relationship and brand loyalty being trivial factors accounting for ABS to sales conversion.

In order to take an overview of the last year's conversion of ABS made by retailers for all brands and its conversion into sales, detailed data was taken into consideration. It was interesting to note that on one hand, where retailers booked a brand and sold it to a significant level, they also sold some brands without

booking, i.e., by purchasing it from the respective distributor and selling it on the other hand when the demand prevails.

Exhibit 6 shows that the value for correlation coefficient comes out to be 0.754, which implies that there is predictability between the two factors. That is, whatever amount is booked by retailer involves his commitment but apart from the booking, he may also go for direct purchase for a particular brand.

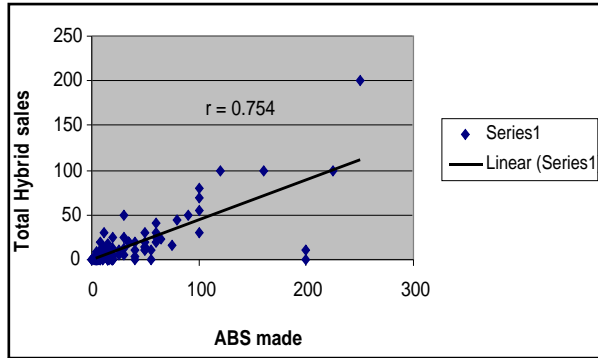


Exhibit 6: Conversion of total hybrid paddy booked to the quantity sold last year

When inquired about Pioneer's hybrid paddy booked and quantity sold last year, the retailers gave a feedback that they were not quite appealed by the advance booking scheme last year so the quantity was not booked at a high level.

Exhibit 7 shows that the value of correlation coefficient comes out to be 0.603 which is not very significant. So, we can conclude that there is a slight significance between the booked and the sold quantity as far as PHI Seeds is concerned.

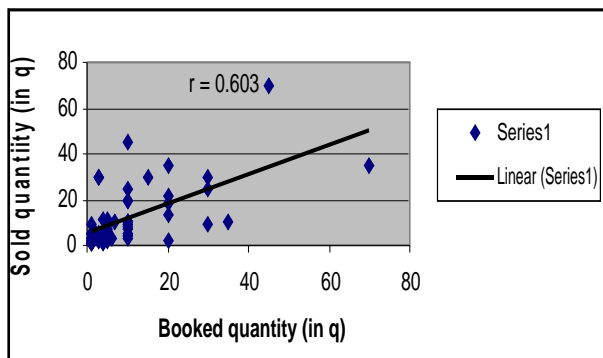


Exhibit 7: Conversion of Pioneer hybrid paddy booked to the quantity sold last year

However, when the demand for Pioneer's brand (especially PHB 71) was seen by them, they purchased it from the respective distributor and sold it. Statistics from the sample population show that on one hand, where the quantity booked was 57.5 mT, the sales made was 67.125 mT, i.e. there was a good number of retailers who were not actually involved in PHI ABS but were selling it at time of season. Therefore, the level of predictability becomes low in this case.

When inquired about the closest competitor of PHI Seeds, Arize of Bayer crop science, there was a significant correlation of 0.7661 in the amount of booking and selling for it (as apparent from exhibit 8).

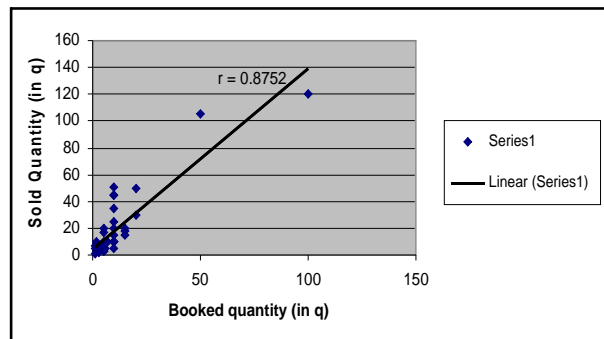


Exhibit 8: Conversion of Arize hybrid paddy booked to the quantity sold last year

About the attractiveness of Arize ABS last year, the respondents said that it wins the demand in market due to the unique selling proposition of the brand. In order to fulfill the demand, they tend to invest in Arize to assure its availability in the market at time of season. Besides, in most of the cases, it was found that sold quantity tends to surpass the booked quantity in the case of Arize hybrid paddy.

As far as other popular brands are concerned, they display a slightly significant level of predictability as far as the ABS to Sales relationship is concerned, as evident from exhibit 9. Based on the sales and booking statistics, the next two brands were Nath and Manisha.

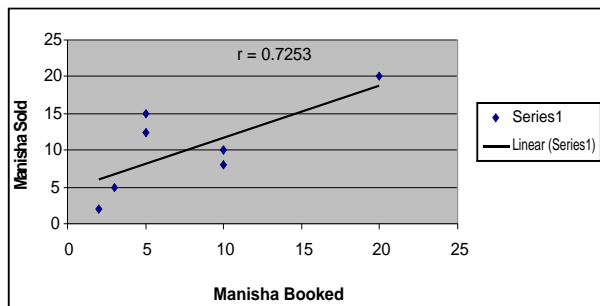
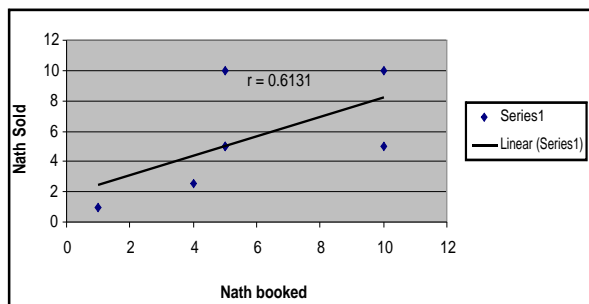


Exhibit 9: Conversion of other hybrid paddy booked to the quantity sold last year

The inference that can be drawn from these graphs is that companies would require a strong and much appealing ABS to capture a good amount of market share for the next year that is 2008.

When inquired about current years' i.e., 2007, ABS participation, the retailers seemed to be pretty excited with the uniqueness offered in the form of Free Good Offer (i.e., 15 kg of PHB 71 brand to be distributed on sale of 420 kg of the order booked). Also, from exhibit 10, it is quite clear that the correlation between the two factors is strong and the value comes out to be 0.965.

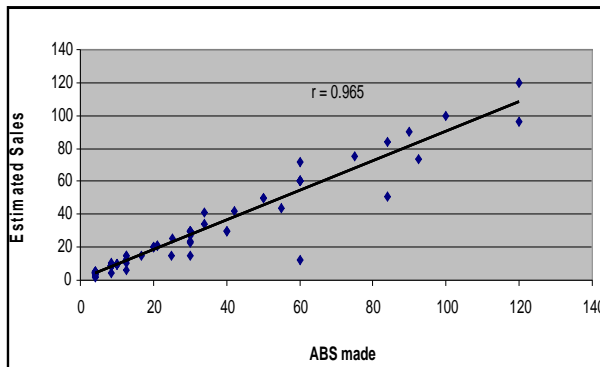


Exhibit 10: Estimated conversion of PHI hybrid paddy booked into sales this year

As a matter of fact, the retailers were not at all expecting such a rewarding scheme from a top-notch brand like Pioneer. However, certain retailers complained the late arrival of this scheme in the market as they committed to have invested more in this scheme. They were also very much committed to have converted this offer.

One of the crucial conditions was that, in case of a subsidy from government, the retailers can avail the FGO quantity by selling only a minimum quantity of advance booked quantity of the worth of the token money. From the value of correlation coefficient (which is 0.932), we can conclude that there would be a good conversion of ABS into actual sales.

The correlation for the closest competitor of PHI Seeds, Proagro or Arize of Bayer crop science is even higher than that of PHI Seeds and the value of correlation coefficient is 0.993, as evident from exhibit 11. When asked about the confidence level of this trend, the retailers advocated the pull of brand in the mind of farmers.

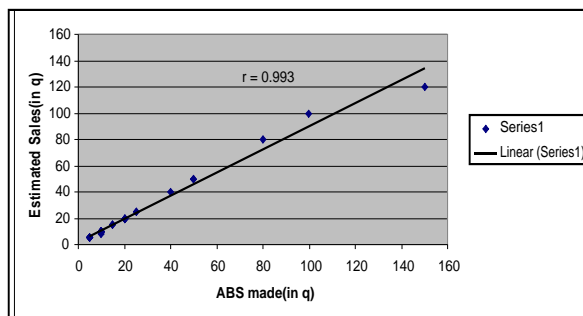


Exhibit 11: Estimated conversion of Proagro hybrid paddy booked into sales this year

This pull has been quite successfully challenged by the efficient Product Differentiation Activities by the field force of PHI Seeds.

Retailers admitted to being quite shaky over the existence of subsidy in the market. One of the quite obvious logic presented by the retailers was that in such a condition, rather a push would be there for PHI Seeds in order to achieve the FGO by selling quantity worth the token money paid for the booking. However, Proagro still remains the numero uno as per the retailer's feedback in the mind of farmers.

The next brand to have achieved a good number of ABS in the sample size happens to be

Manisha. This brand happens to be quite preferred brand in the area near to Nepal's border. The key features offered by the ABS of Manisha is the high return on investment made by the company. It also happens to have a strong correlation between ABS made and estimated sales since the correlation coefficient, as per exhibit 12 come out to be 0.971 which is quite significant.

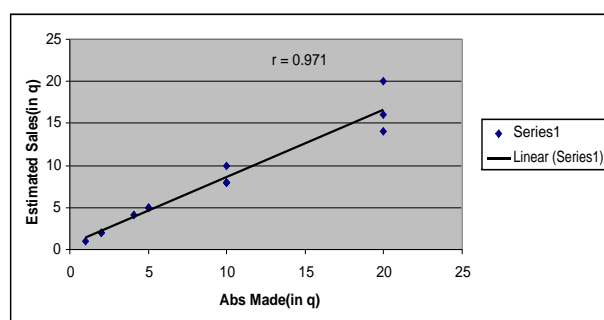


Exhibit 12: Estimated conversion of Manisha hybrid paddy booked into sales this year

It also offers an assurance of cash back at an annual interest rate of 12 percent in case of subsidy or government intervention. The gold bonanza assures a gift on every slot of investment made by the company. Even though Manisha had a high token money as compared to PHI Seeds and Proagro, it managed to have the next highest quantity (after Pioneer and Proagro) booked by the retailers in the sample population.

The strategy also happened to be strategically timed between December and January so the retailers were lured into it. Timing plays a vital role in any ABS since retailers have an investment plan beforehand of booking season and any offer that appeals to them, wins a good amount of booking.

#### Conclusions and Observations

By the analysis of the facts, it is quite evident that the concept of launching ABS circular in Hindi

has a winning edge over other companies' circular in English.

And, highly effective field activities (Product Differentiation Activities) of PHI Seeds play a vital role in enhancing the awareness level of farmers. The scheme won the applause of retailers but the distributors, however, were quite discontented with the retailer oriented Advance booking scheme (ABS). The fear due to subsidy offered by government is on the top of mind of retailers. However, they are also in the process of finding some method to combat the market situation.

#### Footnotes :

1. Bellantuono Nicola, Iliara Giannoccarob, Pierpaolo Pontrandolfoa and Christopher S. Tangca (2006). "Dipartimento di Ingegneria Meccanica e Gestionale, Politecnico di Bari, viale Japigia" 182, 70125 Bari, Italy, retrieved from URL <http://www.sciencedirect.com> on February 20, 2008
2. Manninga Kenneth C. and David E. Sprottb(2007). "Multiple unit price promotions and their effects on quantity purchase intentions" retrieved from URL <http://www.sciencedirect.com> on February 21, 2008

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