

Important Points

- Golden rice is a transgenic crop of the future with high Vit. A content. Millions of people suffer from Vit. A deficiency which leads to vision impairment. Transgenic rice has been developed which is capable of synthesizing beta carotene, the precursor of Vitamin A. The transgenic rice variety is now being crossed with adapted varieties through field tests to make them grow in an year or two.
- Golden rice is a transgenic food crop which may help in solving the problem of night blindness in developing countries. Golden rice or miracle rice is rich in vitamin A or beta-carotene and iron.
- Bioprospecting refers to exploring molecular, genetic and species level diversity for process of discovery and commercialisation of new products of economic importance
- Bioprospection can be said to have two different - sides. On one hand, the many bioprospecting activities provide opportunities to make human life better, e.g. the opium poppy gave us a pain reliever called morphine, the white willow tree helped us develop aspirin, our knowledge about spoiled sweet clover gave rise to a powerful anticoagulant called warfarin. While on the other hand, this activity poses a threat to biodiversity because it provides opportunities for biopiracy.
- Genetic engineering has been successfully used for producing transgenic mice. Many transgenic mice are designed to increase our understanding of how genes contribute to development of diseases. For example transgenic mice are being used to test the safety of polio vaccine.
- Biopiracy refers to the use of bioresources by multinational companies and other organisation without proper authorisation from the countries and people concerned with compensatory payment.
- The milk contained the human alpha-lactalbumin and was nutritionally a more balanced product for human babies than natural cow-milk.