

POSITION PAPER ON MODERN BIOTECHNOLOGY

(Adopted by AFSTA General Assembly on 31st March 2006 in Entebbe, Uganda)

The African Seed Trade Association (AFSTA) recognizes the importance of Modern Biotechnology in improving crop varieties and its potential as part of an integrated approach towards enhancing food production and sustainable agricultural development in Africa.

Improving crop yields and reducing loss to pests and diseases has always been important to plant breeders; they continually identify desirable traits in plants and transfer these to other plants as a basis for crop improvement. Breeders have in the past relied on traditional breeding methods to do this. However, these techniques have evolved with time making it easier to obtain desired agronomic qualities in plants. Modern Biotechnology is one such technique which offers precision in identifying interesting traits in one plant, and transferring these into other varieties.

Where Modern Biotechnology has been applied to agriculture it has proven useful in improving the yield and quality of crops, whilst impacting on the environment in a number of beneficial ways such as increasing the adoption of environmentally beneficial conservation tillage practices, which help improve soil and water quality, and decreasing the use of pesticides.

Significant crop improvements include insect resistance in maize and cotton, herbicide tolerance in soybean, maize and cotton and virus-resistance in fruits and vegetables. The technology also holds promise for further crop improvement in areas such as virus-resistance, nutritional enhancement and salinity, which could see farmers obtain substantial yields from land previously considered marginal.

Africa, which relies primarily on agriculture, stands to benefit from the application of Modern Biotechnology. Agriculture plays a key socio-economic role in Africa, providing for the livelihoods of over 60% of the continent's active labour force and making the major contribution to the continent's total gross domestic product. Yet in the past decade, crop productivity in Africa has registered a steady decline. The continent loses an estimated 40% of its grain crops to pest, disease and weeds and to post-harvest spoilage. Faced with stagnated yields and increasing population, farmers in Africa have encroached on forested land and resorted to farming in marginal areas in an attempt to meet the growing food demand. Indeed, the African continent has real need to increase food production efficiency per hectare for its fast growing population.

Modern Biotechnology offers important options in meeting food demand and environmental challenges, particularly where traditional breeding techniques have not been able to solve a

specific problem. By means of Modern Biotechnology, Africa will be able to develop superior varieties that can perform under the severe biotic and abiotic stresses that are detrimental to African agriculture. By helping farmers produce greater yields, biotechnology can play a role in making existing farmland more productive, which in turn could help reduce the pressure on marginal land and help preserve biodiversity in conservation areas.

Believing that Africa stands to gain by adopting modern methods of Biotechnology in farming, AFSTA:

- Encourages and supports the research and application of modern biotechnology aimed at improving agricultural productivity.
- Urges the development of appropriate policies and programs to foster rapid development in agricultural biotechnology and at the same time ensure a safe and sufficient food supply while ultimately raising African farmers' standards of living.
- Recommends the use of sound scientific principles in the regulation of products originating from modern biotechnology, in order to allow for the safe application of modern biotechnology in Africa. That this be done in a manner that is practical, enforceable and affordable.
- Recommends that adequate Biosafety laws, regulations and management systems be established as priority, including the domestication of the international Biosafety Protocol, providing the framework for evaluating possible health and environmental risks in the application of this technology.
- Believes that regulatory processes should be harmonized among countries, thereby avoiding duplicative and expensive national approval processes and implemented through regional organisations like UEMOA, ECOWAS, SADC, etc These be based on the widely accepted principles of substantial equivalence as recommended by the Organization for Economic Cooperation and Development (OECD) and the Food and Agriculture Organization (FAO) / World Health Organization (WHO).
- Considers that there are no specific risks inherent to Modern Biotechnology and recommends a product-by-product approach in assessing legitimate Biosafety concerns.
- Urges the use of modern biotechnology to develop improved varieties of 'orphan' crops such as millet, sorghum and cassava, which are key food crops across the continent.
- Acknowledges that the cost considerations in implementing Modern Biotechnology are prohibitive for most African states and appeals for the cooperation of both Multilateral Development Organisations and Foreign Aid Donors in the capacity-building of local scientists towards developing, assessing and implementing the adoption of transgenic crops.

- Encourages discussion and information sharing amongst a cross-section of stakeholders towards building an understanding for Modern Biotechnology within society, which is critical for acceptance and adoption.
- Is willing to cooperate with international organisations dealing with agricultural biotechnology in knowledge-sharing and capacity building.

AFSTA strongly supports the safe use of new biotechnology methods aimed at improving crop varieties and the continued effort to develop and implement a rigorous and comprehensive set of regulatory systems on the continent. AFSTA is keen to ensure that African farmers and societies profit from the benefits of modern crop biotechnology. The Association affirms that the resulting varieties hold great promise for improving the food and feed supply of Africa and the rest the world whilst promoting environmental sustainability, just as past accomplishments of plant breeders have benefited the world.