

Agricultural plastic film cover providing optimal light spectrum for enhanced crop quality and growth.

Technology Overview

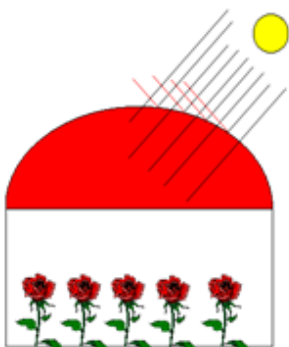
This invention relates to the manipulation of the transmittance spectra of light as it passes through a plastic film in the photosynthetic region of the light spectrum to optimise plant production - both in terms of yield and crop specific quality criteria. The use of REDgrow aims at providing the optimal light quality (i.e., wavelengths) to minimize plant stress but optimise the plant physiological characteristics that can be manipulated by altering the light environment. REDgrow considers plant physiological variables through design and development to aid production both in terms of quality and quantity. This is achieved by modifying the transmittance curve that typifies the cover material to track as closely as possible both the action spectrum of photosynthesis as well as that of the desired crop-specific characteristics.

Market Opportunity

Existing tunnel materials in the market is unable to manipulate the light spectrum, increasing cooling costs and lowering the quality and growth of crops. REDgrow further guarantees an increased lifetime as opposed to conventional films currently available using cross binding polymer technology.

Existing tunnels can be upgraded with this new technology by replacing old film. This technology further creates opportunities for small emerging farmers in Africa, to start cultivating crops. With increased quality and yields of crops and protection against extreme weather conditions.

REDgrow will be offered at the same price point as existing films in the market, providing a price/benefit competitive advantage.



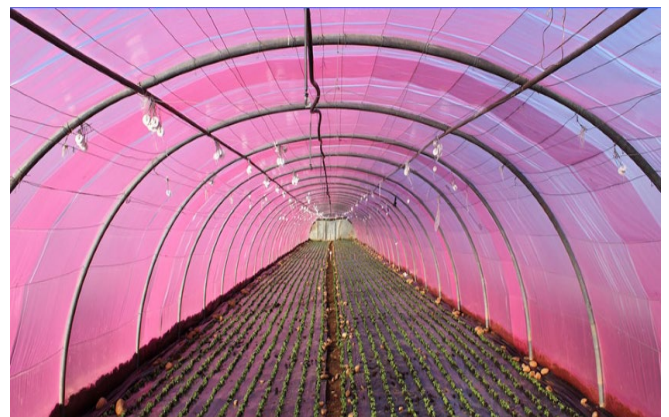
Technology Benefits

- Increased crop quality
- Improved yields
- Faster growth
- Temperature control
- Illuminating unwanted UV's
- Durability
- Minimizes plant stress in warm dry areas

Project status

Patented in USA, ARIPO, Australia, China, Spain, France, India, Italy, Turkey, Netherland, South-Africa.

Currently we are seeking licensee to manufacture and distribute the product.

The logo for REDgrow, with 'RED' in red and 'grow' in green, featuring a small green plant sprout above the 'o' in 'grow'.

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