ABSTRACT

Even though chemical growth regulators are still commonly applied in horticultural production, the increasing environmental pollution and high retardant costs call for a search for new organic methods to produce the desired plant habit. In practice growth modification by providing an adequate temperature or the application of mechanical stimuli triggering stress leading to the growth inhibition, without a negative effect on the plant quality have been already applied.

Many reports demonstrate that light of a specific colour can affect growth and morphogenesis of many plant species. In horticultural production photosensitive films are used, however due to a relatively short durability and a lower sunlight transmission, in practice, the sources of light of a specific spectral composition can be more applicable. It refers particularly diodes, becoming more and more popular.

Keywords: light spectral composition, supplementary lighting, LED lamps