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(57) Abstract :

The present invention provides a fast, non-destructive, low cost and accurate device based on biospeckle technique for characterizing the effects of seed pre-treatments on germination characteristics, wherein said system comprising: at least one white light LED source for region of interest selection; at least one laser pointer as a source of illumination for generating biospeckle patterns; at least one spatial filtering (MO and pinhole) and collimating lens to filter and expand the laser beam; at least one visible image capturing means to capture generated biospeckle patterns of said treated seeds; and processing unit for processing said images to detect the effectiveness of these treatments with stored data, and thereby said unit adapted to process said visible biospeckle patterns using said image processing technique. To be published with figure 1

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