explants was successful. The tissue culture formulation for direct regeneration employed Murashige and Skoog medium with 0,5 mg/l 2,4 D (2,4Dichlorofenoksiacetat) in combination with (0, 0.25, 0.5, 0.75, 1 mg/l) BAP (Benzyl Aminopurine). The best response for direct shoot regeneration was observed after 35 days occurred in media containing 0.75 mg/l of BAP without 2,4 D and this gave the highest efficiency of regeneration frequency of leaf (88%) and highest number of shoot per explant (102). For elongation of shoots, MS basal medium gave a better response compared to ½ MS Medium. The average shoot elongation was about 3.3 cm and this gave an average of 7 leaflets per shoot. Elongated shoots were rooted and leaves growth using MS basal liquid medium and MS basal solid medium with or without 1 mg/l NAA (1-Naphthalene acetic acid). The best response for root induction and leaves growth was observed using MS basal liquid medium without NAA and this gave a frequency of 12 roots per shoot with an average length of 2.75 cm. The regenerated plantlets were acclimatized and hardened by transferring the test-tube plantlets into sterile water for 2 days. The plantlets were successfully established in soil containing compost and top soil (1:1) and the frequency of establishment was 90%. The clonal plantlets were verified using RAPD analysis. The results showed a very high frequency of true-to-type plantlets.

P-90 Intelligent Human Posture Recognition in Video Sequences

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Human posture recognition is gaining increasing attention in the field of computer vision due to its promising applications in the areas of personal health care, environmental awareness, human-computer-interaction and surveillance systems. Human posture recognition in video sequences is a challenging task which is part of the more general problem of video sequence interpretation. In this project, an intelligent human posture recognition system using a single static camera is proposed. The project consists of two stages: the first stage is training and evaluation and the second is deployment. In the first stage, the system is trained and evaluated using a dataset of human postures to â€˜teachâ€™ the system to classify human postures for any future inputs. When the training and evaluation process is deemed satisfactory as measured by recognition rates, the trained system is then deployed to recognize human postures in any input video sequence. In the training stage, to obtain the human posture datasets, video sequences have been recorded and preprocessed to extract human silhouettes. The training and testing were performed using four different classifiers which are Multilayer Perceptron Feedforward Neural networks, Self-Organizing Maps, Fuzzy C Means and K Means. The recognition rates (accuracies) of those classifiers were then compared and results indicate that MLP gives the highest. Performance comparisons between the proposed systems and existing systems were also carried out.

P-92 Hevea Genetic Transformation for Enhanced Recombinant Pharmaceutical Production by the Use of Hevein Promoter

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Pharmaceuticals produced in the latex cytosol of genetically transformed Hevea can be harvested non-destructively by conventional tapping. This study evaluates the promoter activity of the 5'-untranslated upstream regulating region of hevein gene, which encodes the most abundant soluble protein in Hevea latex. Constructs were prepared with the test hevein promoter fragments Hev P1 (0.35kb), Hev P2 (0.45kb) and Hev P3 (0.73kb) that were inserted 5' to the pharmaceutical genes i.e. human protamine 1 (HP1) and human atrial natriuretic factor (HANF), in pGPTV-Kan expression vector. The expression vectors containing HP1 and HANF were electroporated into Agrobacterium tumefaciens GV2260 containing supervirulent plasmid pToK47, which were then used to infect Hevea anther callus. The growth of the putative transformed Hevea callus was monitored on kanamycin selection media. The presence of the pharmaceutical genes (HP1 and HANF), the hevein promoter fragments, and nptII selection marker were verified by PCR on sampled putative transformed callus. The remaining callus