

F-F1-31

Study of adaptation experiment as an indoor plant for cold and light stress in *Hedera helix* (Ivy)

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Public participation in the planning of urban greening has been identified as being of vital importance. Environmental problems experienced in low-cost high-density housing settlements.

Ivy is known to easy growing indoor plants. Ivy can, moreover, be used as a plant of greening wall. We collected many different ivies and investigated to tolerance of cold and light stress for applying an indoor plant for greening wall.

Fifteen ivies were analysed to obtain genetic distance by RAPD. DNA extraction was performed by Qiagen DNeasy mini Kit. About 20 primers were tested for RAPD analysis. On the contrary of wide variation in morphological traits. RAPD fingerprints showed rather monomorphic pattern depicting narrow genetic variation among the variants. We screened ivies for greening wall. Ivies were investigated for tolerance of cold and light stress. And we found several ivies for greening wall plants. These selected ivies will be facilitated a proper plant for greening wall.

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F-F1-32

Histochemical Study of *Rosa rugosa* and *Rosa multiflora* for Improvement of Germination Percentage in Rosa

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Cultivar of rosa was known to difficult to germinate. Germination process was retarded or ceased due to viability. We studied seed viability to temperature stress and seeds of various maturing stages. Temperature stress known to overcome dormancy in several species. We investigated tolerance of seed to from minus 5 to 50°C temperature stress in *Rosa rugosa*. And seed viability was analysed by Tetrazolium test in *Rosa multiflora* to different stages of seed.

Seeds were cut and studied for viability by Tetrazolium test. The seeds in oven from 30 to 40°C were tolerable but over 50°C was intolerable. We investigated cold tolerance of seed and found the seed in water more tolerable than the seed in air. Ripened seed of *Rosa multiflora* showed weak response to Tetrazolium test.

Fruit development was related maternal parent. We investigated pericarp structure by Scanning Electron Microscope (SEM). *Rosa rugosa* and *Rosa multiflora* were analysed by pericarp structure. They showed different pericarp structure. Conformation of seed viability might facilitate of germination if the seeds have any physical and physiological problem.

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