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# Rapid and Efficient Suspension Development System Using Agronomically Important Rice Genotypes

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## Aim of investigations

- To extend the genotype background of protoplast work on agronomically important rice genotypes,
- Establishment of simple, speedy and reproducible suspension development system,
- Improvement of protoplast technology and plant regeneration,
- Test of regenerants under nursery condition.

## Results and conclusions

The results show that cell suspension technique, protoplast culture and plant regeneration methods can be extended to different agronomically important varieties with the following conditions:

- strict callus selection (embryogenic or early-embryogenic) on proline-included medium for development of suspension
- using of N6 (Chu, 1978) or G (Chen, 1986) macro- and micronutrients in suspension and protoplast culture medium
- embryogenic callus induction in protoplast-derived colonies (ABA, Dicamba) before plant regeneration
- self pollinated protoplast-derived regenerants are fertile in 60-65% and these are useful for practical goals.

