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# Rice seed priming with Se : a novel approach to mitigate As induced adverse consequences on growth, yield and As load in brown rice.

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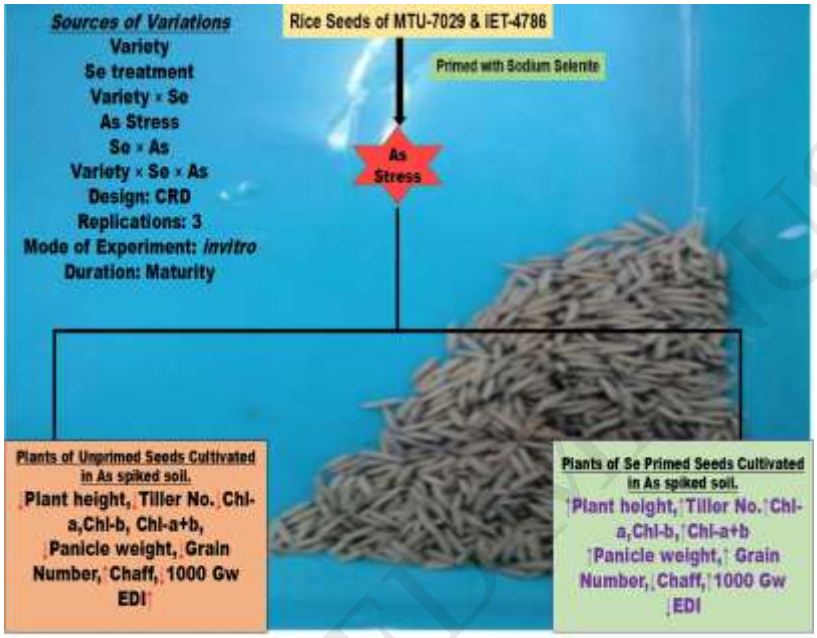
Graphical abstract




Highlights

- Reported for the first time, seed priming with Se reduces As content in rice grain.
- Se primed rice plant significantly reduces As translocation to the aerial parts.
- Cultivating Se primed rice seedlings promotes growth, yield irrespective of variety.
- Consumption of brown rice of Se primed plant effectively reduces As intake.
- Reduction in As intake is irrespective of gender & work load of adult population.

**Abstract**

The current investigation was laid down to investigate the consequences of cultivating (till maturity) selenium (Se) primed seedlings of two contrasting rice varieties in arsenic (As) free and As spiked pot soil. At maturity, Se primed seedlings (both tested varieties) cultivated alike the controls (in As free condition) were found to posses significantly ($p<0.001$) greater