

Research Interest/Expertise

I have been working in the field of genome editing in plants since 2012. So, my primary interest is in targeted genome editing in plants. I have been using this technology for inhibition of begomoviruses' infection in plants. I have used TALEs, TALENs, Cas9, dCas9 and multiplexed Cas9 for resistance against begomoviruses.

I am also interested in using CRISPR/Cas9 technology for genetic improvement in cereal crops for biotic and abiotic stress resistance/tolerance and quality improvement. My future interests are further extended in remote control and tunable expression of genes in plants using artificial transcription factors (activators/ repressors) and epigenome modifiers.