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SPECTRUM

Vegetative filter strips for preventing soil and nutrient losses from the fields

Effectiveness of vegetative filters strips (VFS) with *Eulaliopsis binata* and *Dicanthium annulatum* (both grasses) in crop fields and waterways in different widths with various runoff rates was evaluated at the Research Farm, Vasad. Data revealed that in crop fields, vegetative filter strips reduced runoff, soil and nutrient losses up to 40%, 65%, 70%, respectively. These strips increased crop yield up to 20%. From the experimental data it was also revealed that the vegetative filter of *Dicanthium annulatum* in the waterways reduced soil loss up to 80%.

Vegetative filter strips in crop fields

Runoff flow in vegetative waterways with varying grass filter coverage

It is recommended that the vegetative filters strips, combining *Eulaliopsis binata* and *Dicanthium annulatum*, can be planted at 45-m spacing with 1-2 m width in the fields and in water ways; 50% of grass coverage can be maintained to prevent runoff, soil and nutrient losses from crop fields and for ultimately reducing sedimentation in water-bodies.

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