VETIVER HEDGES AS WATER DIVERSION BARRIERS

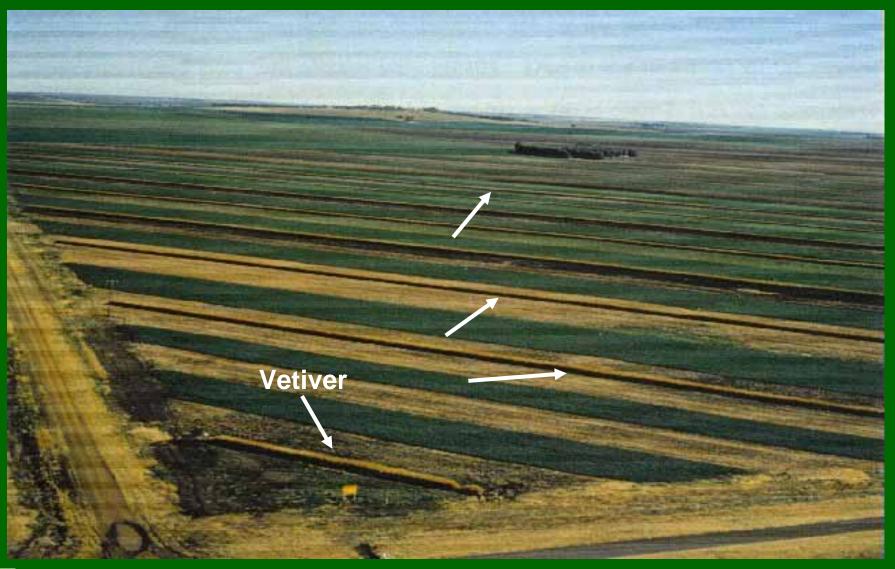
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Vetiver hedges for flood erosion control in strip cropping on the flood plain (<1% slope) in Queensland, Australia





A mature hedge protecting the crops





In principle, the hedge acts as a level bank, spreading concentrated flow and slowing down flood water and traps sediment.





The hedges spread, slow down flood water and reduce erosion. When built on a gradient between 1-5% it can be used as a diversion barrier





Trapping eroded sediment.







In a flume test a mature hedge can retain up to 40-45cm of water



Erosion at the end of the hedge, showing it is a very effective diversion barrier





Erosion at the end of the hedge, showing it is a very effective diversion barrier









Diversion barrier for water conservation on a steep slope with short check rows to reduce flow velocity





One year after planting with short check rows









Suggestion: Straighten the row out as in terrace layout, using average gradient, do not worry about the dips, and plant check rows (VI 1m) to reduce excessive flow



