

UTILIZATION OF AGRO BY PRODUCT PROSOPIS JULIFLORA IN CONSTRUCTION INDUSTRY

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The experimental investigations are carried out to study the effect of prosopis juliflora in RCC structure by partial replacement or adding on cement. Prosopis juliflora inflorescence is small, green-yellowish spikes without any fragrance or attractiveness. Prosopis juliflora is one of these species that has performed much better than many native woody species. At the moment, prosopis juliflora provides approximately 75% of fuel wood needs of rural people in arid and semi arid regions of India. These species has become naturalized and spread over the greater part of north-west, central, west and south India. Prosopis juliflora is xerophytic and is adapted to many soil types under a wide range of moisture conditions. Prosopis juliflora has been used to arrest wind erosion and stabilize sand dunes on coastal areas. It is fast growing, nitrogen-fixing and tolerant to arid conditions and saline soils. Under the right conditions, Prosopis juliflora can produce a variety of valuable goods and services. But wide spread prosopis juliflora has become an invader species so removal of the plant is into necessity now. Mostly the plant is removed by uprooting and is burnt. An experimental investigation is carried out on a concrete containing waste prosopis juliflora ash in the range of 0% to 20% by weight for M-20 grade concrete. Material was produced, tested and compared with conventional concrete in terms of workability and strength. These tests were carried out on standard cube of 150*150*150 mm for 28 days to determine the compressive strength of concrete.