

Comparison of Sugarcane Yields under Various Drainage Systems at Kapileswarapuram, East Godavari District

M Karunya, H V Hema Kumar, M RaghuBabu, I BhaskaraRao and G Veera Prasad
College of Agricultural Engineering, Bapatla 522 101, Andhra Pradesh

ABSTRACT

Drainage system plays a vital role to combat waterlogging in agricultural lands. Conventional drainage measures require huge capital investment and require lot of integrity among farmers in terms of maintenance too, it is felt that the mole plough drainage technology could be popularized in the waterlogged sugarcane fields, could be easily adapted by the farmers without disturbing the natural recourses with proper ecological, economical disturbance. Further the mole plough could be easily fabricated by among village artisans. Major agricultural fields of some of the coastal districts namely Guntur, Prakasam, Krishna, East Godavari and West Godavari of Andhra Pradesh (A.P) suffer with waterlogging and salinity problems. Under the close supervision and guidance of the subject matter experts of Acharya N G Ranga Agricultural University, a network of drainage systems, namely open, mole and subsurface drainage systems were installed in farmers' fields of Kapileswarapuram, East Godavari with the support of M/s Sarvaraya sugars private Limited, Chelluru, East Godavari District to benefit the farming community in terms of recommending better drainage system and better crop variety in their waterlogged fields. Two varieties of sugarcane CO7805 and 2000V46 were planted in study area within these two varieties 2000V46 variety gave high yield compare to other variety. Among all drainage systems mole drainage system gave high yield 63.23 t/ha followed by open drainage system. The yields under SSD were found not satisfactory because of less pumping hours by the field staff in accordance with the adjoin paddy growers.

Key words : Mole drainage, Subsurface drainage and Open drainage.