

# Name of the technology : Crop intensification technologies in tobacco

Year (s) of development : 2017-2019

## Technology details

There is greater scope for intensification of tobacco with maize or sorghum during *kharif* season followed by tobacco in *rabi* instead of the fallow-tobacco. Among the different cropping systems maize –tobacco system is recorded higher system productivity, profitability in tobacco growing Vertisols of Andhra Pradesh.

A one hectare based integrated farming system (IFS) study was undertaken to evaluate different cropping systems, livestock and fish cultivation as components of IFS for enhancing system productivity, profitability and resource recycling. One hectare integrated farming system generated a net returns of Rs. 1,65,443/ha/year besides providing employment opportunities to the farm family as well as meeting food, feed and fodder requirement from same land holding.

Under rainfed Alfisols pre rabi korra is suitable technology for enhanced farm returns. Growing fox tail millet (korra) as pre-rabi crop, an additional net income of Rs 10,000 to 25,000/- can be obtained per hectare.











Maize-tobacco system

Tobacco based integrated farming system

Pre rabi Korra

## Impact of the technology

Maize-tobacco system enhanced the productivity (37.3%) and profitability (41.5%) in comparison to fallow-tobacco in tobacco growing black soil Region of Andhra Pradesh. Tobacco based Integrated farming system enhanced the farm income (net returns of Rs. 1,65, 443/ha/ year) year besides providing employment opportunities to the farm family as well as meeting food, feed and fodder requirement from same land holding.

An additional net income of Rs 10,000 to 25,000/- can be obtained per hectare depending on the rainfall in kharif season by growing fox tail millet (korra) as pre-rabi crop, in southern region of Andhra Pradesh.

#### **Publications/commercialization**

- Kumar, T.K, D. Damodar Reddy, C. Chandrasekhararao and S. Kasturi Krishna. 2020. Resource
  use efficiency and system productivity as influenced by crop intensification in FCV tobacco
  growing Vertisols of Andhra Pradesh. Tobacco Research. 46(2): 66-68.
- Kumar, T K, D. Damodar Reddy, C. Chandrasekhararao, S. Kasturi Krishna. And Y. Subbaiah. 2021. Diversified Integrated farming system for enhancing system productivity and profitability in tobacco growing Vertisols of Andhra Pradesh Tobacco Research. 47(2): 94-96.
- ICAR-CTRI Annual Reports 2018-19 & 2019-20.

### Investigators/Developers

T. Kiran Kumar, M. Anuradha, D. Damodar Reddy, C. Chandrasekhara Rao, S. Kasturi Krishna and M. Sheshu Madhav