**429.** Ranga Rao, V. and Ramachandram, M. 1977. Growth and development of safflower (*Carthamus tinctorius* L.) in relation to seasonal variation. *Mysore J. Agric. Sci.*, 11: 3-11.

The influence of seasonal variations on growth and development of two varieties of safflower was studied. Seeding time exerted pronounced effect on the magnitude and extent of expression of growth, yield, yield attributes, length of growing season and in the periods required for completion of successive stages of plant development. Unlike in kharif, relative growth rate of central stem was negligible in the first 25 days after seeding but extended for relatively longer period with winter sowings. Plantings undertaken during October culminated in superior growth and development, maximum pre-flowering and postflowering periods and in the realization of higher yields. The variety, 7-13-3 was found to be superior to US-10 for various yield and yield components. Temperature was found to be the most critical factor influencing optimum seeding time of irrigated safflower in the region. Length of growing season influenced yields significantly with the duration of reproductive phase.