

GRIFITH, G. G., and E. E. SCHWEIZER, USDA-ARS Forage and Range Research, Logan, UT 84302 and USDA-ARS Crops Research Laboratory, Ft. Collins, CO 80523. - Effect of different cropping systems on soil populations of plant parasitic nematodes.

Plant parasitic nematodes are associated with plants throughout the world and it is only by disruption of their native habitat or the introduction of another nematode species that an imbalance between nematode species occurs within a given niche. This can result in positive, negative, or neutral responses of the nematode species present, and there may be a direct or indirect effect on the growth of native or introduced plant cultivars. The effects of a four-year

WILSON, ROBERT G.^{1*}, ERIC D. KERR, AND PAUL PROVANCE, University of Nebraska, 4502 Avenue I, Scottsbluff, NE 69361. - Growth and Development of Oil-Radish and Yellow Mustard Trap Crops in Nebraska.

Growth and development of two varieties of oil-radish and one variety of yellow mustard were compared when planted every 15 days beginning April 1 and ending September 15. For each 5 C increase in soil temperature from April 1 to August 1 there was a 10 cm increase in trap crop height when crop height was measured 6 weeks after planting and planting occurred every 15 days beginning April 1. Although oil-radish and yellow mustard seeds would germinate and grow when planted from April 1 to September 15, maximum plant growth was observed when trap crops were planted between June 15 and August 15. The period of maximum plant growth corresponds to the period when average soil temperature at 15 cm was greater than 20 C. When oil-radish and yellow mustard were planted between April 15 and August 15 and harvested at flowering, percent protein and in vitro dry matter digestibility ranged from 13 to 17% and 64 to 79%, respectively.