UTILIZATION OF PRECISION AGRICULTURE TO DEVELOP SITE SPECIFIC TREATMENT OF NEMATODES IN THE NORTH DELTA

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Abstract

Nematodes are not evenly distributed in a field. Recent research in LA, AR and GA indicated that root-knot nematodes cause more damage and subsequent greater yield reductions in low-density sandy soils with lower electrical conductivity (Ec) than in heavier clay soils with higher Ec values. This information is being used to develop methods to apply Telone® II in those areas of the field which should result in the greatest return on investment. Technologies used to map Ec ranges have been developed to determine and map "responsive" soils in the field. GPS guided, precision application equipment can then be used to apply Telone only to those areas of the field where a positive response is most likely to occur. This was the case in several trials conducted in AR. However, this technology is not applicable for all root knot nematode infested fields which was the case in a MO trial due to high nematode pressure across the field with a high sand content soil.