

Effects of Different Mulching Materials and Covering Crops on Soil Properties and Fruit Yield of Sweet Apple

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SUMMARY

This trial is conducted in Pei-Nan and Tai-Ma-Li from July, 1985 to June, 1989 for understanding the effects of different mulching materials and covering crops on soil properties and fruit yield of sweet apple. There were 5 treatments as bahia grass covering, sesbania covering, rice hull mulching (20ton/ha), cutted herbs mulching and the clean tillage as for check.

It showed that bahia grass covering, sesbania covering and rice hullmulching treatments increased soil organic matter, available K and Ca, field water capacity and rised the soil fertilities and then improved both physical or chemical properties. Though fruit yield between 2 experiment sites were significantly different, however, there was non-significantly different among treatments by variance analysis.

Rice hull mulching got the highest fruit yield and bahia covering ranked the second in all treatment and more fruit yield than clean tillage by 10 and 8% in Pei-Nan, 10 and 6% in Tai-Ma-Li respectively.

Fruit quality was not being affected by those treatments.

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