Test of a Harvester-Seeding-System for Winter Wheat in a Self Propelled Six Row Sugar Beet Harvester

by
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Written for Presentation at the
1998 ASAE Annual International Meeting
Sponsored by ASAE

Disney's Coronado Springs Resort
Orlando, Florida
July 12-16, 1988
Three different seeding systems
Lifter-seeding-tests 1996
Drilled seed with disc coulter-seed drill

Broadcast seed in front of lifting unit with pneumatic seed distributor

Broadcast seed in back of lifting unit with pneumatic seed distributor
seed depth of winter wheat
lifter-seeding-tests 1996/1997

Nawroth
Auernhammer
Plant density of winter wheat (BBCH 21/25) lifter-seeding-tests 1996/1997

Nawroth
Auernhammer
Ear density of winter wheat (BBCH 75/80) lifter-seeding-tests 1996/1997

Nawroth Auernhammer
Nawroth
Auernhammer

Number of grains/ear of winter wheat (BBCH 75/80)
lifter-seeding-tests 1996/1997

+/- 1 s

A

BBCH 80

BBCH 75

conventional
lifter-seeding
broadcast seed
in front of
lifting unit
lifter-seeding
broadcast seed
in back of
lifting unit
conventional
lifter-seeding
drilled seed
with disc coulter

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yields of winter wheat
lifter-seeding-tests 1996/1997
Conclusions:

- seeding winter wheat during sugar beet harvesting with a self propelled six row harvester is possible
- no significant influence on yield compared to standard tillage / seeding systems
- reduction of work time and energy consumption
- establishing of winter wheat possible also after very late harvesting dates and under bad soil conditions
- restricted to self propelled sugar beet harvesters with hoppers and no "on the go" unloading to trailers
- not usable for seeding headlands because of heavy soil compaction by harvester turning/traffic
- further investigations on optimization of seeding quality and seed distribution necessary
- trials of autumn 1997 have been destroid by ravens on all two locations and on the conventional as well as on the harvester-seeding variants