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

by
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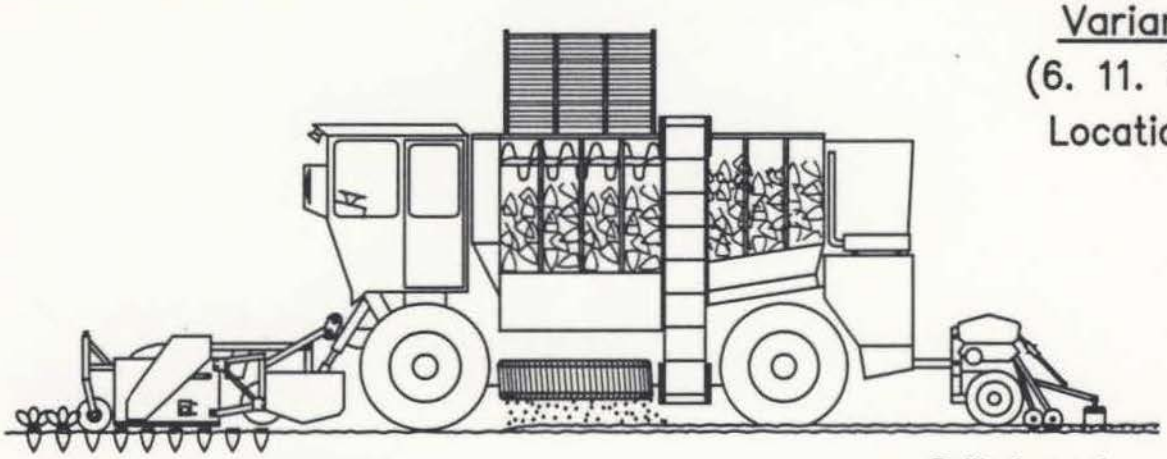
Variant I
(6. 11. 1996)
Location B

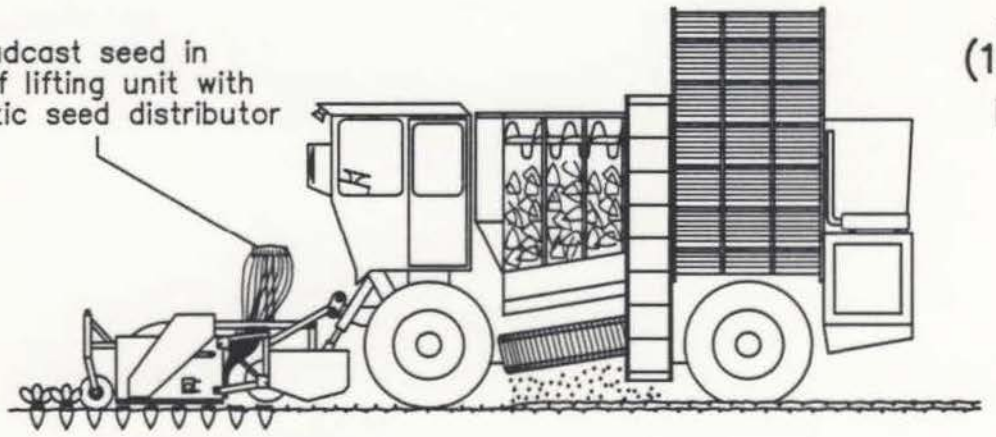


Sugar beet harvest
without top saving

Drilled seed
with disc coulter–
seed drill

Variant II
(19. 11. 1996)
Location A

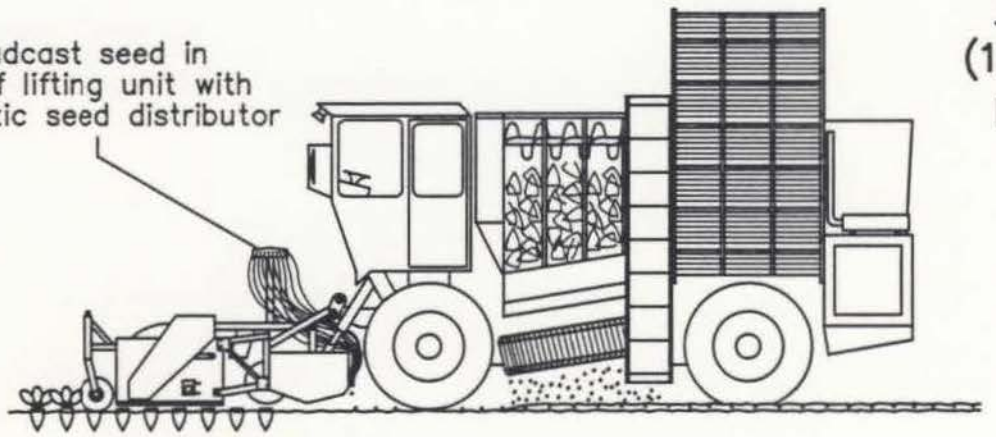
Broadcast seed in
front of lifting unit with
pneumatic seed distributor



Sugar beet harvest
without top saving

Variant I
(19. 11. 1996)
Location A

Broadcast seed in
back of lifting unit with
pneumatic seed distributor



Sugar beet harvest
without top saving

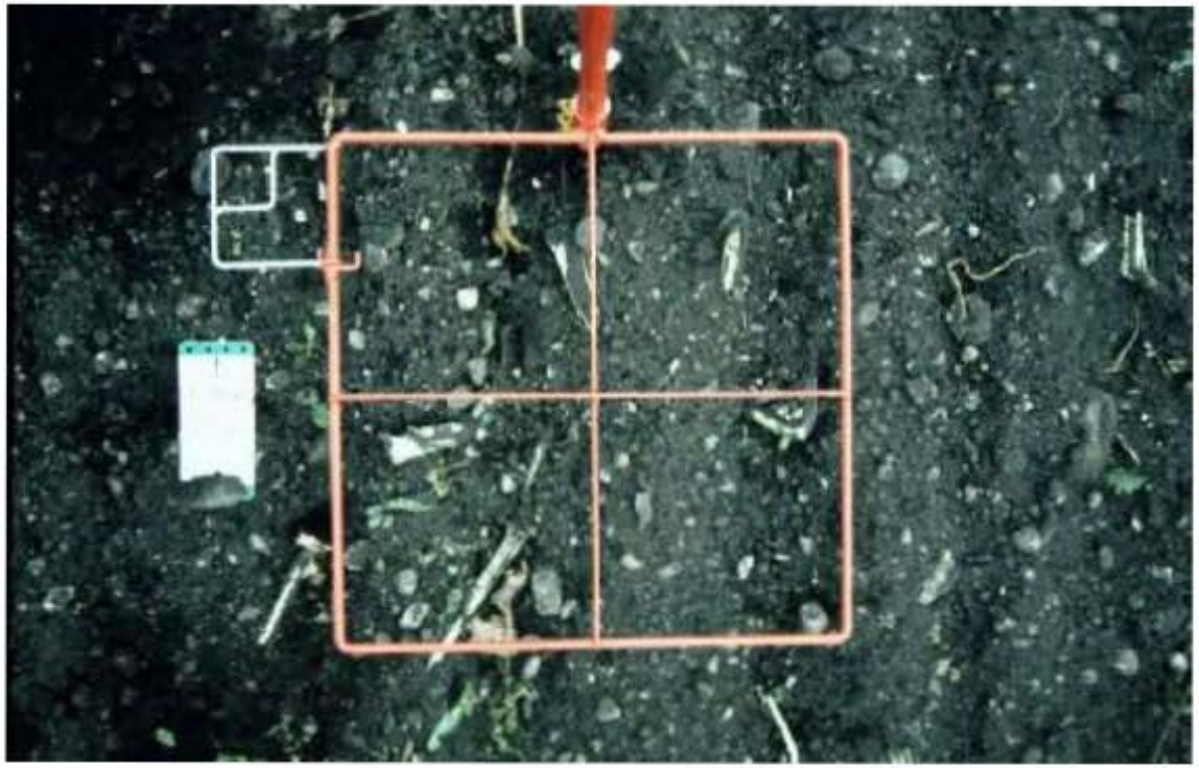
Nawroth Auernhammer Demmel	**Three different seeding systems** **Lifter-seeding-tests 1996**	982 025 LANDTECHNIK WEIHENSTEPHAN Be 982 155

Drilled seed with disc coulter-seed drill

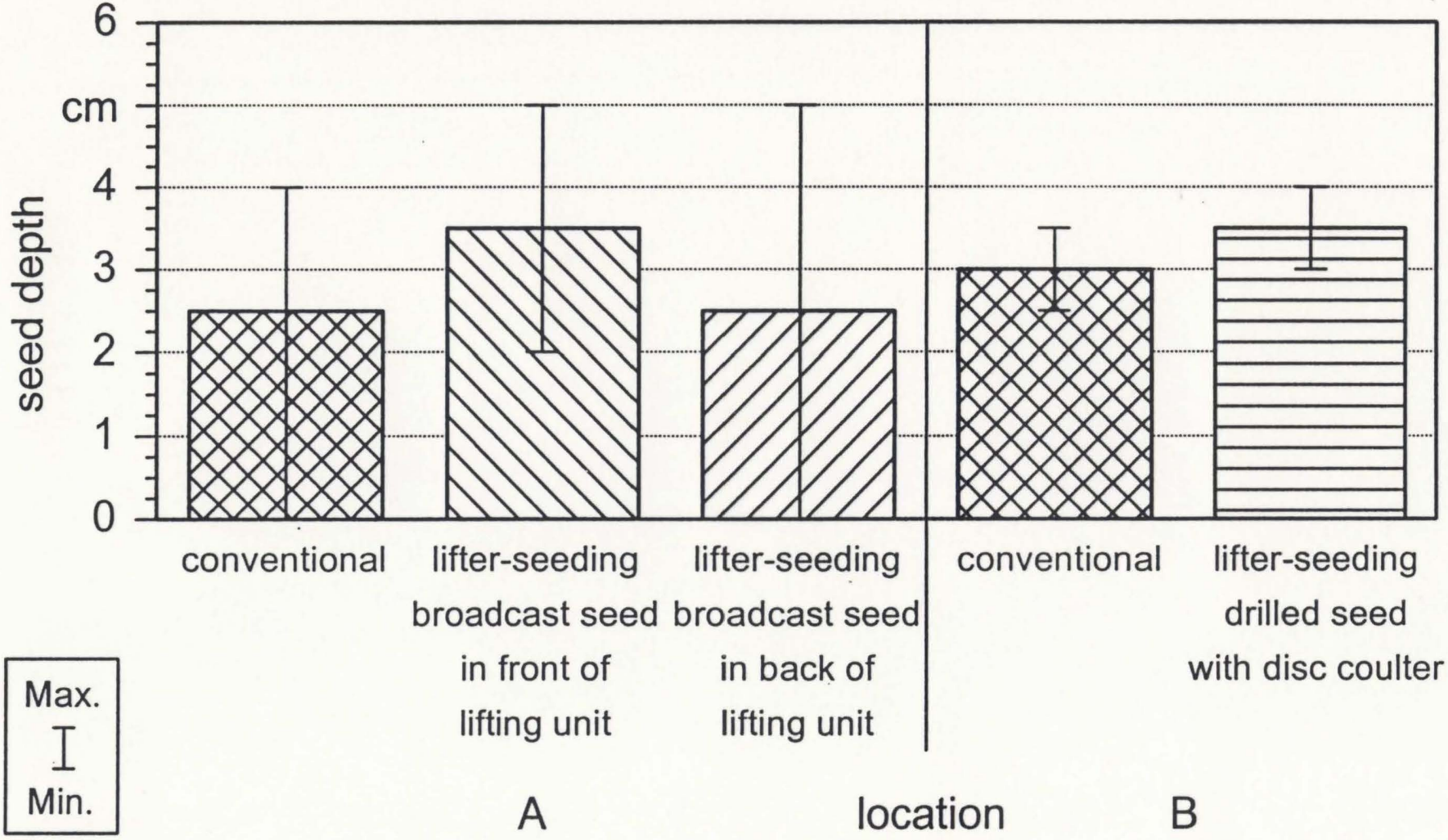
Broadcast seed in front of lifting unit with pneumatic seed distributor

Broadcast seed in back of lifting unit with pneumatic seed distributor

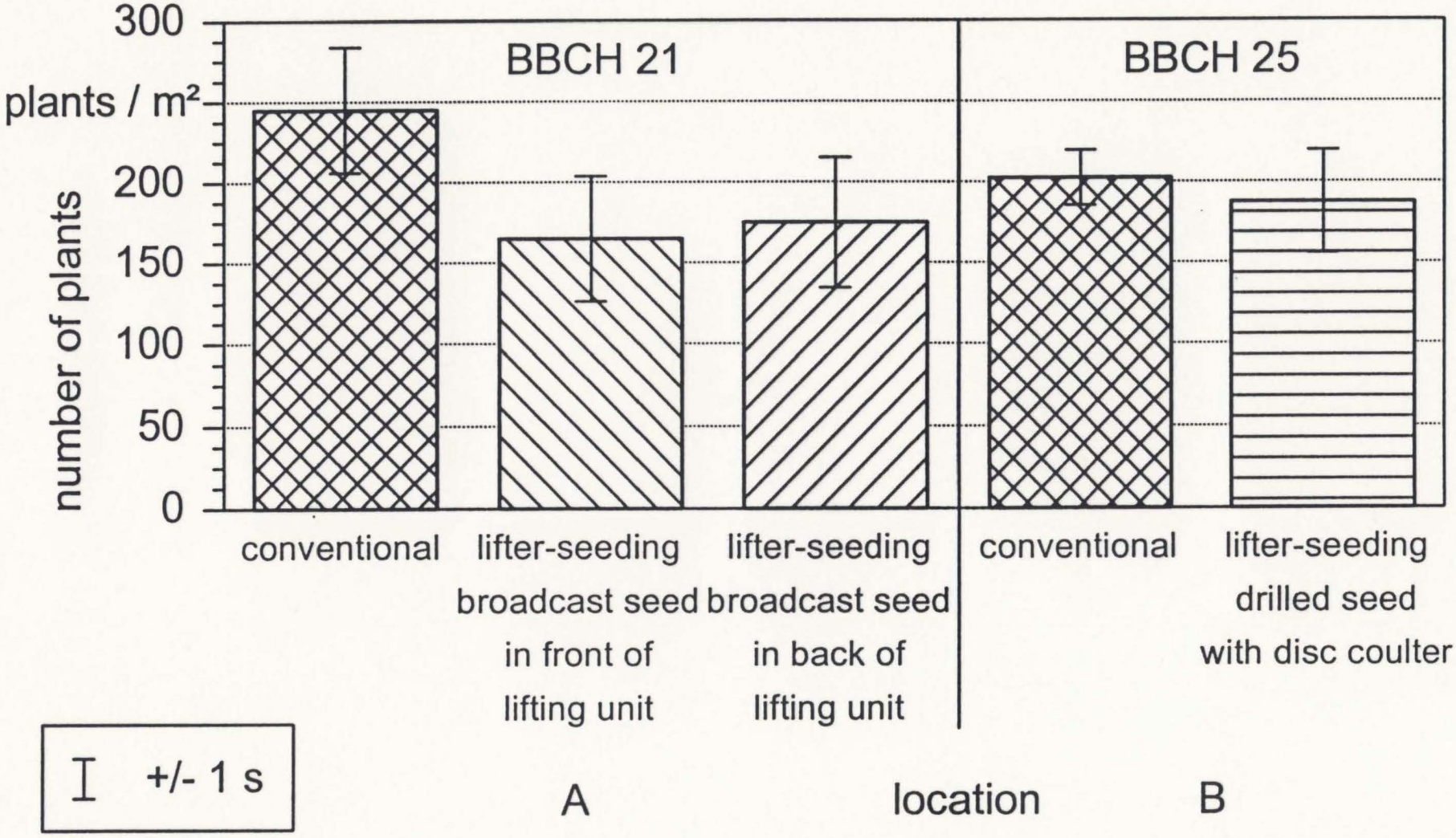
Seed depth measurement



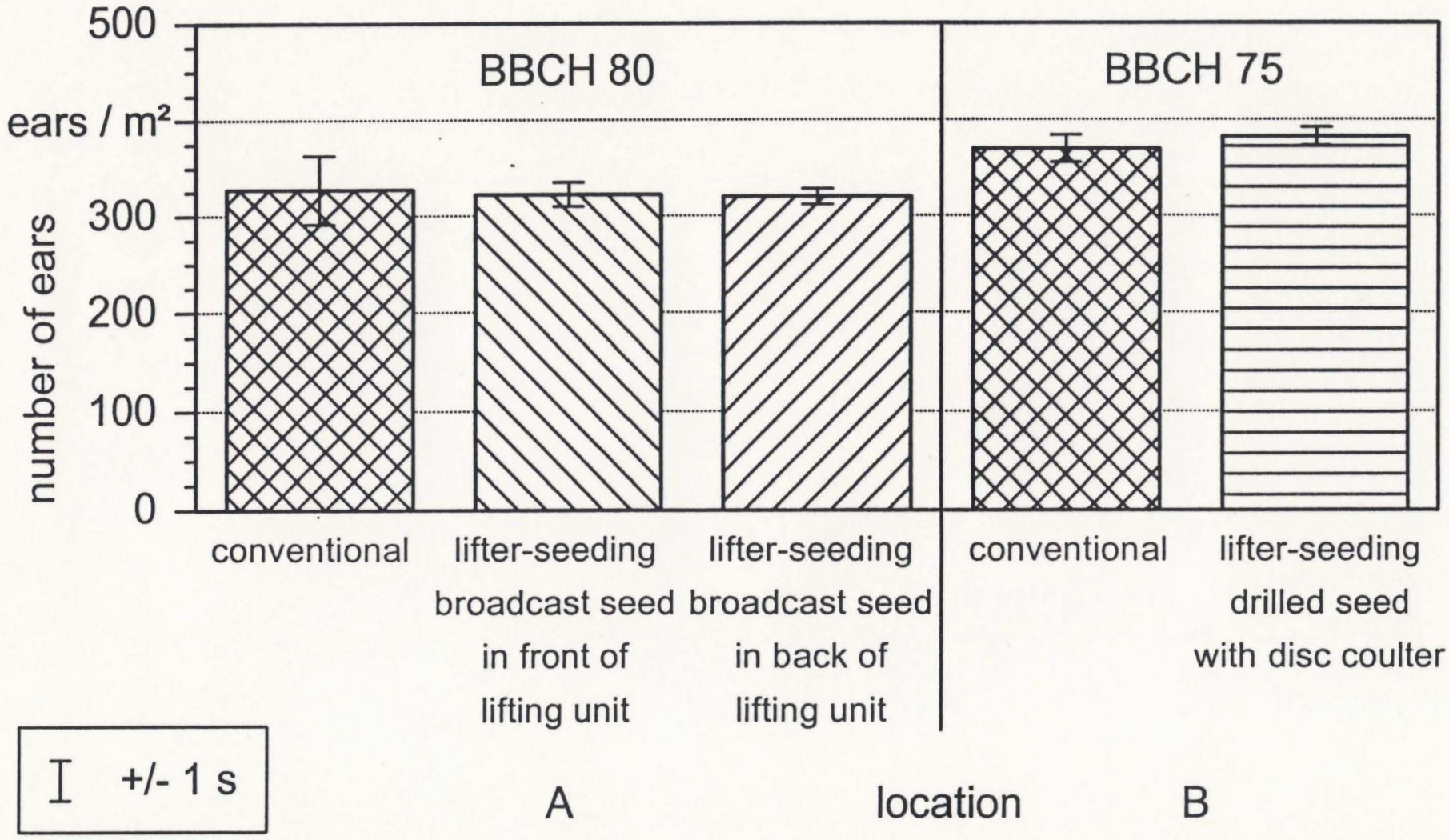
Seed distribution measurement



Nawroth Auernhammer	seed depth of winter wheat lifter-seeding-tests 1996/1997	LANDTECHNIK WEIHENSTEPHAN 972 AuN 015 .cdr



Nawroth Auernhammer	Plant density of winter wheat (BBCH 21/25) lifter-seeding-tests 1996/1997	LANDTECHNIK WEIHENSTEPHAN 972 AuN 016 .cdr



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

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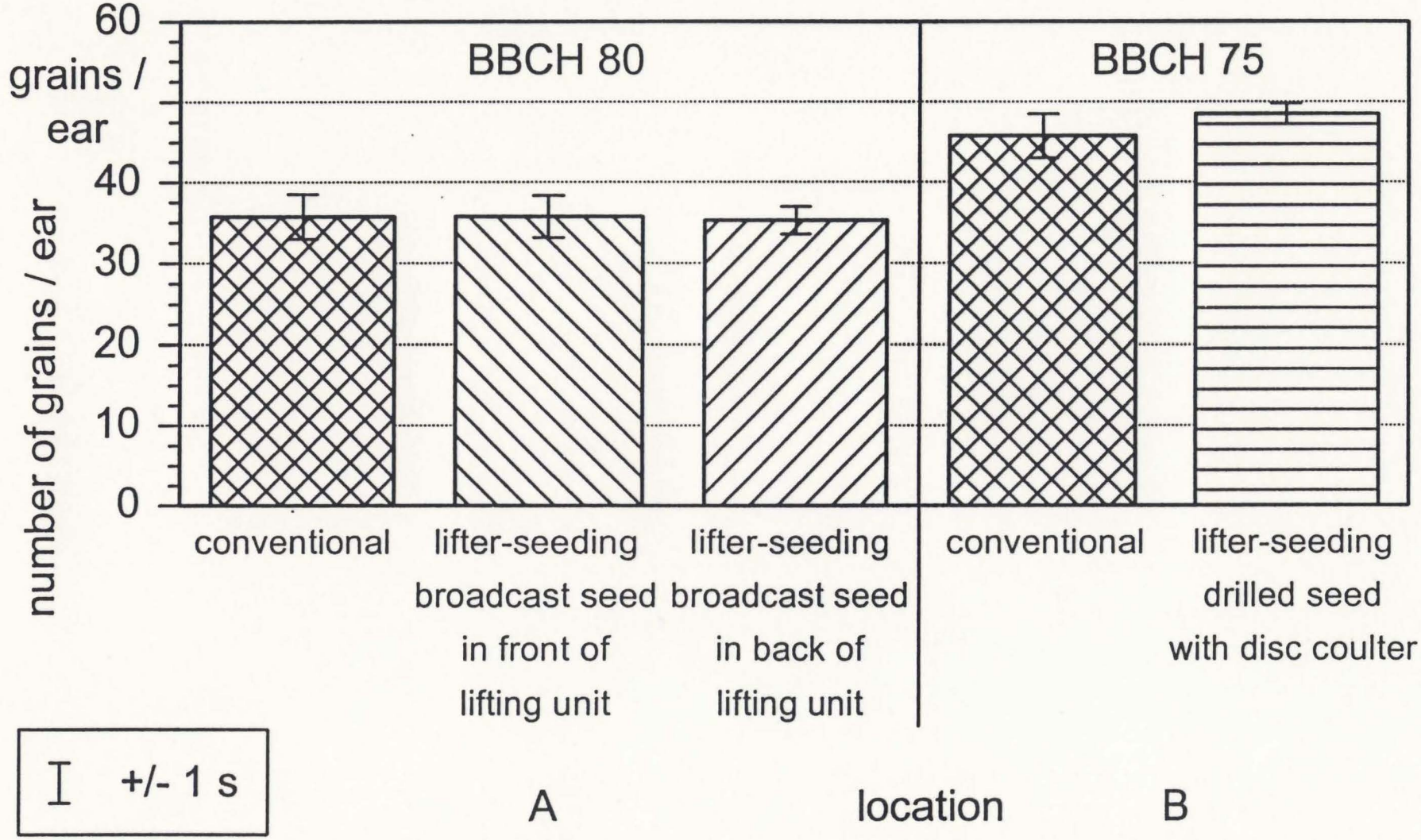
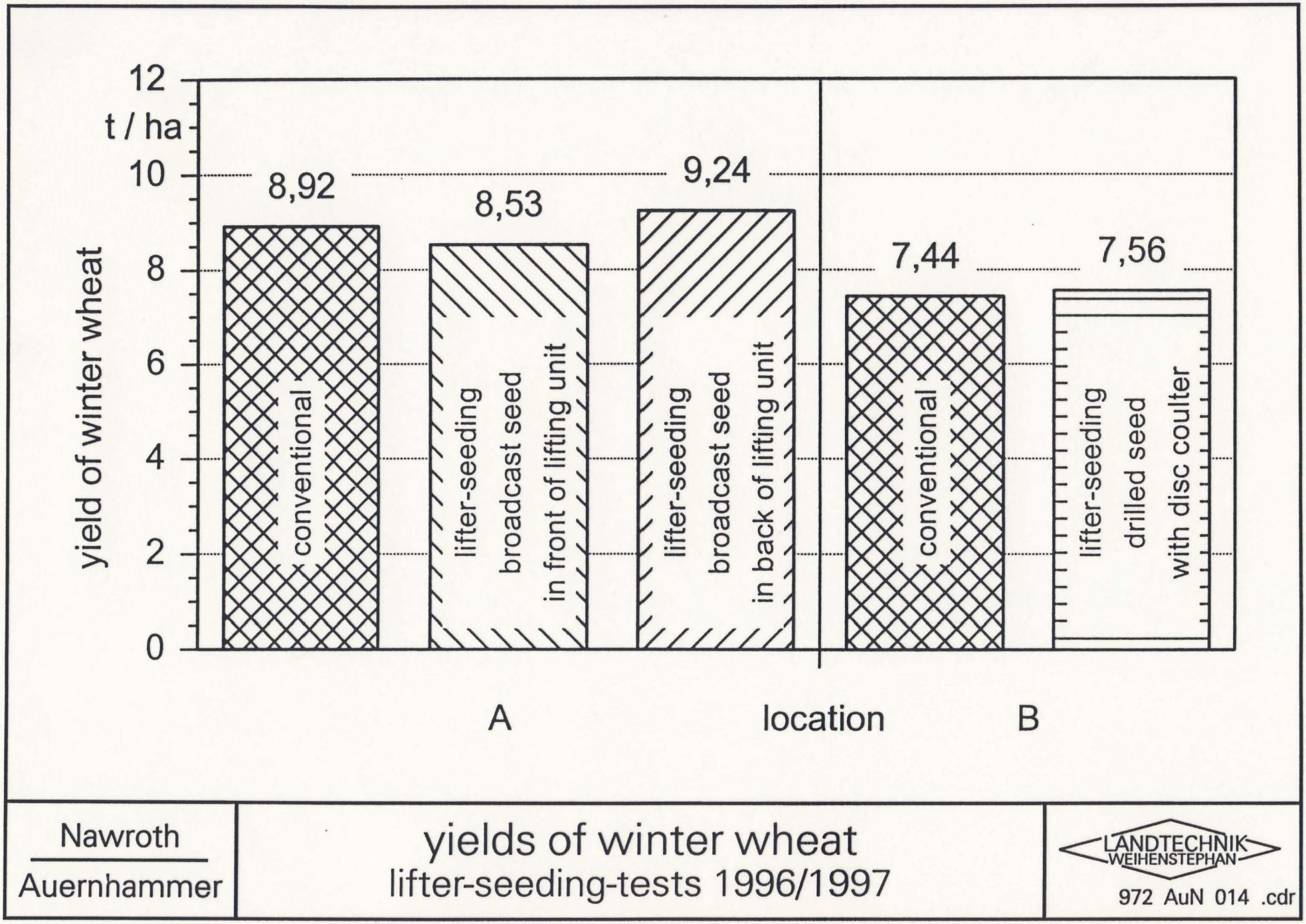
972 AuN 017 .cdr



Nawroth / Auernhammer	Number of grains/ear of winter wheat (BBCH 75/80) lifter-seeding-tests 1996/1997	LANDTECHNIK WEIHENSTEPHAN 972 AuN 018 .cdr



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

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972 AuN 014 .cdr

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

Demmel
Auernhammer

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