

The cultural control of some important pests in cabbage (*Brassica oleracea* var. *capitata* L.) and onion (*Allium cepa* L.) using companion plants

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ELECTRONIC SUPPLEMENTARY MATERIAL (ESM)

The authors are fully responsible for both the content and the formal aspects of the electronic supplementary material. No editorial adjustments were made.

SUPPLEMENTARY MATERIAL 1. THE LIST OF KEYWORD COMBINATIONS USED IN THE OBTAINING PROCESS OF SCIENTIFIC ARTICLES

Singular keywords: see Material and Methods

Combination of two keywords:

Companion plants + cabbage, intercrops + cabbage, trap crops + cabbage, undersowing + cabbage, living mulch + cabbage, companion plants + *Brassica*, intercrops + *Brassica*, trap crops + *Brassica*, undersowing + *Brassica*, living mulch + *Brassica*, companion plants + onion, intercrops + onion, trap crops + onion, undersowing + onion, living mulch + onion, companion plants + *Allium*, intercrops + *Allium*, trap crops + *Allium*, undersowing + *Allium*, companion plants + vegetable, intercrops + vegetable, trap crops + vegetable, undersowing + vegetable, living mulch + vegetable.

Combination of three keywords:

Companion plants + cabbage + clover, intercrops + cabbage + clover, trap crops + cabbage + clover, undersowing + cabbage + clover, living mulch + cabbage + clover + companion plants + onion + clover, intercrops + onion + clover, trap crops + onion + clover, undersowing + onion + clover, living

mulch + onion + clover, companion plants + vegetable + clover, intercrops + vegetable + clover, trap crops + vegetable + clover, undersowing + vegetable + clover, living mulch + vegetable + clover.

Companion plants + cabbage + *Trifolium*, intercrops + cabbage + *Trifolium*, trap crops + cabbage + *Trifolium*, undersowing + cabbage + *Trifolium*, living mulch + cabbage + *Trifolium*, companion plants + onion + *Trifolium*, intercrops + onion + *Trifolium*, trap crops + onion + *Trifolium*, undersowing + onion + *Trifolium*, living mulch + onion + *Trifolium*, companion plants + vegetable + *Trifolium*, intercrops + vegetable + *Trifolium*, trap crops + vegetable + *Trifolium*, undersowing + vegetable + *Trifolium*, living mulch + vegetable + *Trifolium*.

Companion plants + cabbage + net yield, intercrops + cabbage + net yield, trap crops + cabbage + net yield, undersowing + cabbage + net yield, living mulch + cabbage + net yield, companion plants + onion + net yield, intercrops + onion + net yield, trap crops + onion + net yield, undersowing + onion + net yield, living mulch + onion + net yield, companion plants + vegetable + net yield, intercrops + vegetable + net yield, trap crops + vegetable + net yield, undersowing + vegetable + net yield, living mulch + vegetable + net yield.

Alternative control + cabbage + companion plants, alternative control + cabbage + intercrops, alternative control + cabbage + trap crops, alternative control + cabbage + undersowing, alternative control + cabbage + living mulch, alternative control + onion + companion plants, alternative control + onion + intercrops, alternative control + onion + trap crops, alternative control + onion + undersowing, alternative control + onion + living mulch.

Non-chemical control + cabbage + companion plants, non-chemical control + cabbage + intercrops, non-chemical control + cabbage + trap crops, non-chemical control + cabbage + undersowing, non-chemical control + cabbage + living mulch, non-chemical control + onion + companion plants, non-chemical control + onion + intercrops, non-chemical control + onion + trap crops, non-chemical control + onion + undersowing, non-chemical control + onion + living mulch.

Alternative control + insect pest + cabbage, alternative control + insect pest + onion, alternative control + insect pest + vegetable, non-chemical control + insect pest + cabbage, non-chemical control + insect pest + onion, non-chemical control + insect pest + vegetable, companion plants + insect pest + cabbage, companion plants + insect pest + onion, companion plants + insect pest + vegetable, intercrops + insect pest + cabbage, intercrops + insect pest + onion, intercrops + insect pest + vegetable, trap crops + insect pest + cabbage, trap crops + insect pest + onion, trap crops + insect pest + vegetable, undersowing + insect pest + cabbage, undersowing + insect pest + onion, undersowing + insect pest + vegetable, living mulch + insect pest + cabbage, undersowing + living mulch + onion, living mulch + insect pest + vegetable.

Alternative control + Lepidoptera + cabbage, alternative control + Lepidoptera + onion, alternative control + Lepidoptera + vegetable, non-chemical control + Lepidoptera + cabbage, non-chemical control + Lepidoptera + onion, non-chemical control + Lepidoptera + vegetable, companion plants + Lepidoptera + cabbage, companion plants + Lepidoptera + onion, companion plants + Lepidoptera + vegetable, intercrops + Lepidoptera + cabbage, intercrops + Lepidoptera + onion, intercrops + Lepidoptera + vegetable, trap crops + Lepidoptera

+ cabbage, trap crops + Lepidoptera + onion, trap crops + Lepidoptera + vegetable, undersowing + Lepidoptera + cabbage, undersowing + Lepidoptera + onion, undersowing + Lepidoptera + vegetable, living mulch + Lepidoptera + cabbage, undersowing + living mulch + onion, living mulch + Lepidoptera + vegetable.

Alternative control + Diptera + cabbage, alternative control + Diptera + onion, alternative control + Diptera + vegetable, non-chemical control + Diptera + cabbage, non-chemical control + Diptera + onion, non-chemical control + Diptera + vegetable, companion plants + Diptera + cabbage, companion plants + Diptera + onion, companion plants + Diptera + vegetable, intercrops + Diptera + cabbage, intercrops + Diptera + onion, intercrops + Diptera + vegetable, trap crops + Diptera + cabbage, trap crops + Diptera + onion, trap crops + Diptera + vegetable, undersowing + Diptera + cabbage, undersowing + Diptera + onion, undersowing + Diptera + vegetable, living mulch + Diptera + cabbage, undersowing + living mulch + onion, living mulch + Diptera + vegetable.

Alternative control + Hemiptera + cabbage, alternative control + Hemiptera + onion, alternative control + Hemiptera + vegetable, non-chemical control + Hemiptera + cabbage, non-chemical control + Hemiptera + onion, non-chemical control + Hemiptera + vegetable, companion plants + Hemiptera + cabbage, companion plants + Hemiptera + onion, companion plants + Hemiptera + vegetable, intercrops + Hemiptera + cabbage, intercrops + Hemiptera + onion, intercrops + Hemiptera + vegetable, trap crops + Hemiptera + cabbage, trap crops + Hemiptera + onion, trap crops + Hemiptera + vegetable, undersowing + Hemiptera + cabbage, undersowing + Hemiptera + onion, undersowing + Hemiptera + vegetable, living mulch + Hemiptera + cabbage, undersowing + living mulch + onion, living mulch + Hemiptera + vegetable.

Alternative control + Coleoptera + cabbage, alternative control + Coleoptera + onion, alternative control + Coleoptera + vegetable, non-chemical control + Coleoptera + cabbage, non-chemical control + Coleoptera + onion, non-chemical control + Coleoptera + vegetable, companion plants + Coleoptera + cabbage, companion plants + Coleoptera + onion, companion plants + Coleoptera + vegetable, intercrops + Coleoptera + cabbage,

intercrops + Coleoptera + onion, intercrops + Coleoptera + vegetable, trap crops + Coleoptera + cabbage, trap crops + Coleoptera + onion, trap crops + Coleoptera + vegetable, undersowing + Coleoptera + cabbage, undersowing + Coleoptera + onion, undersowing + Coleoptera + vegetable, living mulch + Coleoptera + cabbage, undersowing + living mulch + onion, living mulch + Coleoptera + vegetable.

Alternative control + Thysanoptera + cabbage, alternative control + Thysanoptera + onion, alternative control + Thysanoptera + vegetable, non-chemical control + Thysanoptera + cabbage, non-chemical control + Thysanoptera + onion, non-chemical control + Thysanoptera + vegetable, companion plants + Thysanoptera + cabbage, companion plants + Thysanoptera + onion, companion plants + Thysanoptera + vegetable, intercrops + Thysanoptera + cabbage, intercrops + Thysanoptera + onion, intercrops + Thysanoptera + vegetable, trap crops + Thysanoptera + cabbage, trap crops + Thysanoptera + onion, trap crops + Thysanoptera + vegetable, undersowing + Thysanoptera + cabbage, undersowing + Thysanoptera + onion, undersowing + Thysanoptera + vegetable, living mulch + Thysanoptera + cabbage, undersowing + living mulch + onion, living mulch + Thysanoptera + vegetable.

Alternative control + onion thrips + cabbage, alternative control + onion thrips + onion, alternative control + onion thrips + vegetable, non-chemical control + onion thrips + cabbage, non-chemical control + onion thrips + onion, non-chemical control + onion thrips + vegetable, companion plants + onion thrips + cabbage, companion plants + onion thrips + onion, companion plants + onion thrips + vegetable, intercrops + onion thrips + cabbage, intercrops + onion thrips + onion, intercrops + onion thrips + vegetable, trap crops + onion thrips + cabbage, trap crops + onion thrips + onion, trap crops + onion thrips + vegetable, undersowing + onion thrips + cabbage, undersowing + onion thrips + onion, undersowing + onion thrips + vegetable, living mulch + onion thrips + cabbage, undersowing + living mulch + onion, living mulch + onion thrips + vegetable.

Alternative control + onion fly + cabbage, alternative control + onion fly + onion, alternative control + onion fly + vegetable, non-chemical control + onion fly + cabbage, non-chemical control + on-

ion fly + onion, non-chemical control + onion fly + vegetable, companion plants + onion fly + cabbage, companion plants + onion fly + onion, companion plants + onion fly + vegetable, intercrops + onion fly + cabbage, intercrops + onion fly + onion, intercrops + onion fly + vegetable, trap crops + onion fly + cabbage, trap crops + onion fly + onion, trap crops + onion fly + vegetable, undersowing + onion fly + cabbage, undersowing + onion fly + onion, undersowing + onion fly + vegetable, living mulch + onion fly + cabbage, undersowing + living mulch + onion, living mulch + onion fly + vegetable.

Alternative control + flea beetles + cabbage, alternative control + flea beetles + onion, alternative control + flea beetles + vegetable, non-chemical control + flea beetles + cabbage, non-chemical control + flea beetles + onion, non-chemical control + flea beetles + vegetable, companion plants + flea beetles + cabbage, companion plants + flea beetles + onion, companion plants + flea beetles + vegetable, intercrops + flea beetles + cabbage, intercrops + flea beetles + onion, intercrops + flea beetles + vegetable, trap crops + flea beetles + cabbage, trap crops + flea beetles + onion, trap crops + flea beetles + vegetable, undersowing + flea beetles + cabbage, undersowing + flea beetles + onion, undersowing + flea beetles + vegetable, living mulch + flea beetles + cabbage, undersowing + living mulch + onion, living mulch + flea beetles + vegetable.

Alternative control + butterfly + cabbage, alternative control + butterfly + onion, alternative control + butterfly + vegetable, non-chemical control + butterfly + cabbage, non-chemical control + butterfly + onion, non-chemical control + butterfly + vegetable, companion plants + butterfly + cabbage, companion plants + butterfly + onion, companion plants + butterfly + vegetable, intercrops + butterfly + cabbage, intercrops + butterfly + onion, intercrops + butterfly + vegetable, trap crops + butterfly + cabbage, trap crops + butterfly + onion, trap crops + butterfly + vegetable, undersowing + butterfly + cabbage, undersowing + butterfly + onion, undersowing + butterfly + vegetable, living mulch + butterfly + cabbage, undersowing + living mulch + onion, living mulch + butterfly + vegetable.

Alternative control + moth + cabbage, alternative control + moth + onion, alternative control + moth + vegetable, non-chemical control + moth + cab-

bage, non-chemical control + moth + onion, non-chemical control + moth + vegetable, companion plants + moth + cabbage, companion plants + moth + onion, companion plants + moth + vegetable, intercrops + moth + cabbage, intercrops + moth + onion, intercrops + moth + vegetable, trap crops + moth + cabbage, trap crops + moth + onion, trap crops + moth + vegetable, undersowing + moth + cabbage, undersowing + Moth + onion, undersowing + moth + vegetable, living mulch + moth + cabbage, undersowing + living mulch + onion, living mulch + moth + vegetable.

Alternative control + aphids + cabbage, alternative control + aphids + onion, alternative control + aphids + vegetable, non- chemical control + aphids + cabbage, non-chemical control + aphids + onion, non-chemical control + aphids + vegetable, companion plants + aphids + cabbage, companion plants + aphids + onion, companion plants + aphids + vegetable, intercrops + aphids + cabbage, intercrops + aphids + onion, intercrops + aphids + vegetable, trap crops + aphids + cabbage, trap crops + aphids + onion, trap crops + aphids + vegetable, undersowing + aphids + cabbage, undersowing + Aphids + onion, undersowing + aphids + vegetable, living mulch + aphids + cabbage, undersowing + living mulch + onion, living mulch + aphids + vegetable.

Alternative control + stink bugs + cabbage, alternative control + stink bugs + onion, alternative control + stink bugs + vegetable, non- chemical control + stink bugs + cabbage, non-chemical control + stink bugs + onion, non-chemical control + stink bugs + vegetable, companion plants + stink bugs + cabbage, companion plants + stink bugs + onion, companion plants + stink bugs + vegetable, intercrops + stink bugs + cabbage, intercrops + stink bugs + onion, intercrops + stink bugs + vegetable, trap crops + stink bugs + cabbage, trap crops + stink bugs + onion, trap crops + stink bugs + vegetable, undersowing + stink bugs + cabbage, undersowing + Stink bugs + onion, undersowing + stink bugs + vegetable, living mulch + stink bugs + cabbage, undersowing + living mulch + onion, living mulch + stink bugs + vegetable.

SUPPLEMENTARY MATERIAL 2. REFERENCES DISCOVERED BY RECOMMENDATIONS OF COLLEAGUES

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