Knox™
Delayed pinking in fresh cut lettuce

Sharing a healthy future
Knox™ is a trait which reduces pinking in cut lettuce; extending the shelf life and decreasing waste of bagged salads. Thanks to this trait, fresh cut companies do not need low-oxygen packaging for lettuce, in turn lowering their costs and giving them more options when blending different types of leaves. Needless to say, these benefits also lead to a better end-user experience; bagged salads stay fresher for longer, resulting in greater consumer satisfaction and less wastage. Knox™ is the result of 10 years of breeding and development work by Rijk Zwaan. Knox™ the delayed pinking trait, won the Fruit Logistica Innovation Award in 2017.

“We want to maintain an edge every day and it all starts with good material”

From a salad leaf perspective, oxidation is always an issue and Knox™ gives us extra time to market. We export a lot of product, we sell to retailers, and we ship product 2,500km across Australia, so each day counts. With lettuce, you eat with your eyes and we want to give customers a really good eating experience. Lettuce has to look fresh and clean cut and Knox™ lifts the whole standard for the industry. Knox really is an outstanding addition to our business.”
**Knox™ variety**  |  **IR**  |  **IR**  |  **Variety description**
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**Batavia lettuce**
Knox™ Meditation RZ (81-04)  |  Bl:16-32,34EU/Nr:0  |  LMV:1  |  Outdoor variety for cutting and whole leaf
Knox™ Arpon RZ (81-296) (t)  |  Bl:16-33EU/Nr:0  |  LMV:1  |  Whole leaf batavia for outdoor and hydro
**Butterhead lettuce**
Knox™ Addia RZ (42-171)  |  Bl:16-32,34EU  |  |  Mediterranean Autumn to Spring tunnel production
Knox™ Garethia RZ (42-156) (t)  |  Bl:16-32,34EU/Nr:0  |  |  Temperate Summer indoor production
Knox™ Corintia RZ (42-185) (t)  |  Bl:16-35EU/Nr:0  |  |  Temperate Summer indoor production
Knox™ 43-173 RZ  |  Bl:16-32,34EU/Nr:0  |  LMV:1  |  Outdoor, shiny green, slow bolting
Knox™ 43-130 RZ (t)  |  Bl:16-35EU/Nr:0  |  LMV:1  |  Outdoor summer variety
**Cos lettuce**
Knox™ Celedona RZ (41-544)  |  Bl:16-32,34EU/Nr:0  |  |  Open Heart Cos for outdoor production
Knox™ Livius RZ (41-149)  |  Bl:17-26,32EU/Nr:0  |  Ss (Rs)  |  Dark green cos lettuce for outdoor production
Knox™ Tuccadona RZ (41-514)  |  Bl:17-26,32EU/Nr:0  |  |  Open Heart Cos for outdoor production
Knox™ Roldona RZ (41-503) (t)  |  Bl:16-32,34EU/Nr:0  |  LMV:1  |  Open Heart Cos for outdoor production
Knox™ 41-140 RZ (t)  |  Bl:16-35EU/Nr:0  |  Ss (Rs)  |  Dark green cos lettuce for outdoor production
**Gem lettuce**
Knox™ Cardaine RZ (41-801) (t)  |  Bl:16-35EU/Fol:1/Nr:0  |  LMV:1  |  Red gem lettuce for outdoor production
**Iceberg lettuce**
Knox™ Dayanas RZ (45-161)  |  Bl:16-26,32EU/Nr:0  |  LMV:1  |  Compact Iceberg for outdoor production
Knox™ 45-466 RZ (t)  |  Bl:16-32,34EU/Nr:0  |  LMV:1  |  Mediterranean winter-type
Knox™ 45-426 RZ (t)  |  Bl:16-35EU  |  LMV:1  |  Subtropical winter variety
Knox™ 45-202 RZ (t)  |  Bl:16-26,32EU/Nr:0  |  LMV:1  |  Vigorous variety for early & late Summer
Knox™ 45-179 RZ (t)  |  Bl:16-35EU/Nr:0/Pb  |  LMV:1  |  Medium to large iceberg for temp Summer

*(t) = For trial purposes only, not for commercial use of the variety*
<table>
<thead>
<tr>
<th>Knox™ variety</th>
<th>HR</th>
<th>IR</th>
<th>Variety description</th>
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<tbody>
<tr>
<td><strong>Salanova® multi-leaf lettuce</strong></td>
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<tr>
<td>Knox™ Hubble RZ</td>
<td>Bl:16-32,34EU/Nr:0</td>
<td>Salanova® green multi-leaf Butter</td>
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<tr>
<td>Knox™ Davinci RZ</td>
<td>Bl:16-35EU/Nr:0</td>
<td>Salanova® red multi-leaf Butter</td>
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<tr>
<td>Knox™ 79-224 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>Salanova® red multi-leaf Butter</td>
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<tr>
<td>Knox™ 79-374 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>Salanova® green multi-leaf Oak</td>
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<tr>
<td>Knox™ Tannat RZ (79-554)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>Salanova® red multi-leaf Batavia</td>
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<td><strong>Incised leaf lettuce</strong></td>
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<tr>
<td>Knox™ Exam RZ (79-10)</td>
<td>Bl:16-34EU/Nr:0</td>
<td>LMV:1/Fol:1 Salanova® green Crispy for outdoor production</td>
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<tr>
<td>Knox™ 79-839 RZ</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® blond Crispy for Spring - Autumn</td>
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<tr>
<td>Knox™ Excipio RZ (79-840)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® green Crispy for outdoor production</td>
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<td>Knox™ 79-862 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® green Crispy for outdoor production</td>
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<tr>
<td>Knox™ 79-824 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® green Lollo for Spring - Autumn production</td>
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<tr>
<td>Knox™ 79-965 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1/Ss (Rs) Salanova® triple red Crispy with spikey leaves</td>
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<tr>
<td>Knox™ 79-941 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® triple red Crispy with frilly leaves</td>
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<tr>
<td>Knox™ 79-936 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® triple red Crispy with spikey leaves</td>
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<tr>
<td>Knox™ 79-920 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>Salanova® red Oakleaf with lobed leaves</td>
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<tr>
<td>Knox™ 79-858 RZ (t)</td>
<td>Bl:16-35EU/Nr:0</td>
<td>LMV:1 Salanova® dark green Lollo with frilly leaves</td>
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As a result of Knox, the presentation and usage of lettuce by the food service industry improves significantly. Sandwiches look more appealing and the quality of lettuce offered in salad bars will drastically improve.

Extended shelf life

Mechanical harvesting

Suitable for foodservice

MAP with higher O₂

Extended shelf life

- Higher purchasing frequency
- Less waste

Mechanical harvesting

- In field
- De-coring iceberg
- Top & tailing cos
- Stronger against pinking of cracked ribs

Suitable for foodservice

As a result of Knox, the presentation and usage of lettuce by the food service industry improves significantly. Sandwiches look more appealing and the quality of lettuce offered in salad bars will drastically improve.

MAP with higher O₂

- Easy packaging
- Faster packaging
- Less sensitive for leaking seals
- New mixes
- No bad smell
Meet our
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