

Vitalis lettuce varieties resistant against new Bremia fysis Bl:34EU and Bl:35EU



The International Bremia Evaluation Board for the EU (IBEB-EU) recently announced two new races of Bremia: Bl:34EU and Bl:35EU. Our tests confirm that a large part of the Vitalis lettuce portfolio is resistant to this new races and also resistant to the full range of Bremia races Bl:16-35EU. This document gives you an overview of all our lettuce varieties that have this new Bremia Bl:34EU and/or Bl:35EU resistance.

Variety	Resistance	
	HR	IR
Babyleaf		
Aerostar	Bl:16-27,29,32,34EU	LMV:1
Celinet	Bl:16-35EU/Nr:0	LMV:1
Kiret	Bl:16-35EU/Nr:0	
Lettony	Bl:16-27,29,31,32,34EU/Pb	
Oaking	Bl:16-35EU/Nr:0	LMV:1
Rosalo	Bl:16-35EU/Nr:0	
Sadawi	Bl:16-35EU/Nr:0	
Vida	Bl:16-35EU/Nr:0	
Batavia		
Bonalisa	Bl:16-35EU/Nr:0	LMV:1/Fol:1
Bovary	Bl:16-32,34EU/Nr:0	LMV:1/Fol:1
Clavelina	Bl:16-32,34EU/Nr:0	
E01A.30503	Bl:16-35EU	
Ferega	Bl:16-35EU	
Flexila	Bl:16-35EU/Nr:0	LMV:1/Fol:1
Ginko	Bl:16-32,34EU	
Ivernia	Bl:16-32,34EU/Nr:0	
Lioba	Bl:16-27,29,32,34EU	LMV:1
Olana	Bl:16-35EU/Nr:0	LMV:1
Ozeka	Bl:16-35EU/Nr:0	LMV:1
Serrana	Bl:16-32,34EU/Nr:0	LMV:1
Zoraga	Bl:16-35EU	

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Variety	Resistance	
	HR	IR
Butterhead		
Analena	Bl:16-25,27-35EU/Nr:0/Pb	LMV:1
Analora	Bl:16-35EU/Nr:0	LMV:1
Analotta	Bl:16-35EU/Nr:0	LMV:1
Anandra	Bl:16-35EU/Nr:0	LMV:1
Brighton	Bl:16-35EU	
Donela	Bl:16-35EU/Nr:0	
Espelo	Bl:16-35EU	
Fairly	Bl:16-34EU/Nr:0	
Fakto	Bl:16-35EU	
Marbelo	Bl:16-35EU/Nr:0	
Octo (E01B.30397)	Bl:16-35EU	
Sebastiano	Bl:16-27,29,32,34EU	
Tatienne	Bl:16-32,34EU/Nr:0	LMV:1
Vitrine	Bl:16-35EU/Nr:0/Pb	LMV:1/Fol:1
Iceberg		
Acula	Bl:16-27,29,32,34EU/Nr:0	LMV:1
Adanto	Bl:16-35EU/Nr:0/Pb	
Alcala	Bl:16-27,29,32,34EU	
Alesso	Bl:16-35EU/Nr:0	
Aureola	Bl:16-27,29,32,34EU/Nr:0	
Berruguete (E01E.10655)	Bl:16-35EU/Nr:0	
Buda	Bl:16-35EU/Nr:0	
Cantola	Bl:16-27,29,32,34EU	
Chavela	Bl:16-27,29,32,34EU	
Eduardo	Bl:16-35EU/Nr:0	
Elmundo	Bl:16-35EU/Nr:0	
Etude	Bl:16-27,29,32,34EU	
Gemela	Bl:16-35EU/Nr:0	
Gonzalo (E01E.10619)	Bl:16-35EU/Nr:0/Pb	
Juanola	Bl:16-27,29,32,34EU	
Oriola	Bl:16-27,29,32,34EU/Nr:0	
Pelayo	Bl:16-35EU	
Pikua	Bl:16-27,29,32,34EU/Nr:0	
Quetglas (E01E.10659)	Bl:16-35EU/Nr:0	
Tesela	Bl:16-27,29,32,34EU	LMV:1

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Leafy		
Alonix	Bl:16-35EU/Nr:0/Pb	
Alzevir	Bl:16-35EU/Nr:0	LMV:1
Avenir	Bl:16-35EU/Nr:0	LMV:1
Azirka	Bl:16-35EU/Nr:0	LMV:1
E01C.30497	Bl:16-35EU/Nr:0	
Figaro (E01C.30475)	Bl:16-35EU/Nr:0	
Kaftan	Bl:16-32,34EU/Nr:0/Pb	
Kassian	Bl:16-32,34EU/Nr:0/Pb	
Lea	Bl:16-33,35EU/Nr:0	Fol:1
Loka	Bl:16-26,28-33,35EU/Nr:0	Fol:1
Magellan	Bl:16-32,34EU/Nr:0	
Opalix	Bl:16-34EU/Nr:0/Pb	LMV:1
Stelix	Bl:16-34EU/Nr:0	LMV:1
Romaine		
Albara	Bl:16-27,29,32,34EU/Fol:1/Nr:0	LMV:1
Alborada	Bl:16-35E/Fol:1/Nr:0	
Alcazaba	Bl:16-35EU/Nr:0	LMV:1/Ss
Aldea	Bl:16-32,34EU/Nr:0	
Amible	Bl:16-27,29,32,34EU/Nr:0	LMV:1/Ss
Battlestar (E01G.10723)	Bl:16-35EU/Fol:1/Nr:0	LMV:1
Carterham	Bl:16-35EU/Nr:0/Pb	LMV:1
Colbiana	Bl:16-32,34EU/Nr:0	
E01G.10728	Bl:16-35EU/Nr:0/Pb	
Eskeletor (E01G.10721)	Bl:16-35EU/Fol:1/Nr:0	LMV:1
Jeluna	Bl:16-32,34EU/Nr:0	
Khan	Bl:16-27,29,32,34EU/Nr:0	LMV:1/Ss
Maureen	Bl:16-21,23-26,28-35EU/Fol:1/Pb	
Mezquite	Bl:16-32,34EU	Fol:1
Moonred	Bl:16-26,28-35EU	LMV:1
Ovired	Bl:16-21,23-26,28-35EU	
Redouan (E01G.10730)	Bl:16-26,28-35EU/Nr:0/Pb	
Rougana (E01G.10568)	Bl:16-35EU/Fol:1/Nr:0	LMV:1

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Variety	Resistance	
	HR	IR
Romaine		
Totana	Bl:16-32,34EU/Nr:0	LMV:1
Tregoney	Bl:16-35EU/Nr:0	
Xalbadora	Bl:16-35EU/Nr:0	LMV:1
Xamena	Bl:16-35EU/Nr:0	LMV:1/Ss
Xaroma	Bl:16-27,29,32,34EU/Nr:0	LMV:1/Ss
Xavira	Bl:16-27,29,31,32,34EU/Nr:0/Pb	LMV:1/Ss
Xenalora	Bl:16-32,34EU/Nr:0	LMV:1/Ss
Ximenes	Bl:16-35EU/Nr:0	LMV:1
Xiomara	Bl:16-35EU/Fol:1/Nr:0	LMV:1
Xolani	Bl:16-35EU/Fol:1/Nr:0	LMV:1

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Explanation of used abbreviations

Lettuce	Code	English name	Scientific name pathogen ISF	Races/Strains	Level of resistance
Viruses	LMV	Lettuce mosaic	Lettuce mosaic virus	1	IR
	TBSV	Lettuce die-back	Tomato bushy stunt virus		HR
Bacteria	Ss	Corky root	Sphingomonas suberifaciens (ex Rhizomonas suberifaciens)		IR
Fungi	Bl	Downy mildew	Bremia lactucae	16-35EU	HR
	Fol	Fusarium wilt	Fusarium oxysporum f.sp. lactucae	1	IR/HR
Insects	Nr	Lettuce leaf aphid	Nasonovia ribisnigri	0	HR
	Pb	Lettuce root aphid	Pemphigus bursarius		HR