

HOP	POSSIBLE SUBSTITUTES		
Admiral – UK	Chinook, Northdown, Challenger, Centennial, Cascade, Amarillo		
Ahtanum – US	Cascade, Amarillo		
Amarillo – US	Cascade, Centennial		
Archer – UK	Santiam, Summer		
Atlas – SI	Aurora, Styrian Golding		
Aurora – SI	Styrian Golding		
Azacca – US	Amarillo, Citra, Delta		
Belma – US	Summer, Huell Melon		
Bitter Gold – US	Galena, Nugget		
Boadicea – UK	Green Bullet, Cascade, Columbus, Chinook		
Bramling Cross – UK	Whitbread Golding		
Bravo – US	Columbus, Zeus		
Buzz Bullets – US	TBC		
Cascade – Taiheke – NZ	Hallertau, Goldings		
Cascade – US	Centennial, Amarillo, Columbus, Ahtanum		
Cashmere – US	Cascade		
Centennial – US	Chinook, Galena, Nugget, Zeus, Columbus		
Challenger – UK	Perle		
Chinook – NZ	Nugget, Northern Brewer, Columbus, Galena		
Chinook – US	Galena, Eroica, Nugget, Bullion		
Citra – US	Simcoe, Cascade, Centennial		
Columbus – US	Zeus		
Comet – US	Galena		
Crystal – US	Liberty, Mount Hood, Hallertau, Ultra		
Czech Saaz – CZ	Saaz, Sterling, Polish Lublin		
Dana – SI	Bobek, Celeia		
Dr Rudi – NZ	Green Bullet		
East Kent Golding – UK	Golding, Whitbread Golding, Progress		
Ekuanot – US	Galaxy, Citra		
El Dorado – US	Galena		

Endeavour – UK	Cascade, Bramling Cross		
Epic – UK	TBC		
Falconers Flight – US	Cascade, Columbus, Centennial		
First Gold – UK	Willamette, East Kent Golding, Styrian Golding		
Flyer – UK	Pilgrim, Phoenix, Bramling Cross		
Fuggle – NZ	Fuggle – UK, Willamette, Styrian Golding		
Fuggle – UK	Fuggle – NZ, Willamette, Styrian Golding		
Fusion – UK	TBC		
Galaxy – AU	Citra, Amarillo, Centennial		
Galena – US	Nugget, Columbus, Zeus		
Glacier – US	Willamette, Fuggle, Tettninger		
Golding – NZ	Fuggle, East Kent Golding, Styrian Golding		
Golding – UK	Fuggle, East Kent Golding, Styrian Golding		
Green Bullet – NZ	Liberty, Hallertauer		
Hallertau Brewers Gold – DE	Hallertauer Mittelfrüh, Tettninger, East Kent Golding		
Hallertau Blanc – DE	Nelson Sauvin		
Hallertau Hersbrucker – DE	Mount hood, Strisselspalter		
Hallertau Magnum – DE	Hallertauer Taurus, Columbus		
Hallertau Mittelfruh – DE	Liberty, Hallertauer		
Hallertau Tradition – DE	Liberty, Ultra		
Herkules – DE	Warrior		
Horizon – US	Hallertauer Magnum		
Huell Melon – DE	Jarrylo, Belma		
Jarrylo – US	Huell Melon		
Jester – UK	Cascade		
Junga – PL	Target, Galena		
Kazbek – CZ	Saaz		
Kohatu – NZ	Wai-ti, Wakatu, Motueka		
Legacy – US	Cluster, Galena, Northern Brewer		
Liberty – NZ	Hallertau, Mount Hood, Traditon		
Liberty – US	Hallertau, Mount Hood, Traditon		

Loral – US	TBC		
Lubelski – PL	Brewers Gold, Nugget		
Magnum – US	Horizon		
Mandarina Bavaria – DE	Cascade		
Marynka – PL	Tettnanger		
Minstrel – UK	Challenger		
Mosaic – US	Simcoe, Nugget		
Motueka – NZ	Saaz, Sterling		
Moutere – NZ	TBC		
Mt Hood – US	Crystal, Strisselspalter		
Nelson Sauvín – NZ	Pacific Jade, Pacifica		
Newport – US	Galena		
North Down – UK	Challenger		
Northern Brewer – DE	Chinook		
Nugget – US	Galena		
Olicana – UK	Cascade		
Orbit – NZ	Pacifica		
Pacific Gem – NZ	Fuggle		
Pacific Jade – NZ	Pacific Gem		
Pacifica – NZ	Perle, Hallertau Mittelfruh		
Palisade – US	Styrian Golding		
Perle – US	Northern Brewer		
Phoenix – UK	North Down, Challenger		
Pilgrim – UK	Target, Pioneer		
Pilot – UK	Galena		
Pioneer – UK	East Kent Golding		
Polaris – DE	TBC		
Progress – UK	Fuggle, Golding		
Rakau – NZ	Amarillo, Summit		
Riwaka – NZ	Czech Saaz		
Santiam – US	Tettnanger		

Saphir - DE	Hallertauer Mittelfrüh		
Simcoe - US	Summit		
Sorachi Ace - US	Citra, Simcoe		
Southern Cross - NZ	Simcoe		
Sovereign - UK	Pioneer, Fuggle		
Spalt Select - DE	Saaz		
Sterling - US	Saaz		
Sticklebract - NZ	Northern Brewer		
Strisselspalt - FR	Mount Hood, Crystal, Hersbrucker		
Styrian Golding - NZ	Fuggle		
Styrian Golding - SI	Fuggle		
Summit - US	Columbus		
Sussex - UK	Fuggle		
Sybilla - FR	Lublin, Northern Brewer, Perle		
Tahoma - US	TBC		
Target - UK	Fuggle, Willamette		
Tettnang - DE	Czech Saaz, Spalter		
Tettnang - US	Czech Saaz, Spalter		
Triplepearl - US	TBC		
Triskel - FR	TBC		
Ultra - US	Tettnanger, Saaz		
Wai-Iti - NZ	Riwaka, Summer		
Waimea - NZ	Pacific Jade		
Wakatu - NZ	Hallertau Mittelfruh		
Warrior - US	Nugget		
Whitbread Golding - UK	Progress		
Willamette - NZ	Fuggle		
Willamette - US	Fuggle		
Wye Challenger - NZ	TBC		
Yakima Gold - US	TBC		
Zythos - US	TBC		