

Area of Development	2021	2022	2023	2024	2025	2026	2027	2028 onwards
Virus Yellow (VY) assurance fund	Established fund to assure the worst hit growers for VY (£12m BS investment)			Possible extension for “early years” post derogation				
Improved grower practices	Improved husbandry Increased hygiene measures Cover crops Increase beneficial insects	Alternative spray trials programme (e.g. raffinate) Improved husbandry Increase beneficial insects Increased hygiene measures Cover crops						Potential for bio plastics Improved husbandry Increase beneficial insects Increased hygiene measures Cover crops
Improved seed germination	Improved pellet coatings to establish crop and earlier sowing to reach 12- leaf stage							
Traditional Seed Breeding	First partially resistant variety launched “Maruscha” (yield penalty compared to standard varieties)	Potential further varieties available	ID Aphid/ Mature plant resistance genes	More varieties with partial Beet Mild Yellowing Virus (BMV)/Beet Yellows Virus (BYV) tolerance/resistance, but with continued yield drag relative to the susceptible alternatives.				More varieties with partial BMV/BYV tolerance/resistance
Sustainable Spray Programme	Emergency Authorisations (EA) for current sprays + Teppeki	3 - 4 established sustainable sprays (not requiring EAs) InSyst, Movento and others.						3 - 4 established sustainable sprays
Gene Editing (GE)	Gene mapping Identification of potential genetic changes	Regeneration into viable plants		Multiplication into sufficient volumes to trial Lab trials to ensure VY resistance expresses in practice Lab trials to screen other detrimental traits Field trials to ensure performance in field conditions National Listing trials			Multiplication into commercial volumes Recommended List 3rd year	Continued multiplication Commercial availability

				EU food/feed approval process for products derived from specific GE sugar beet event Approval for products to enter EU market through international supply chains (from 2030)
Neonics Derogation	3-year derogation to allow for development of practices / seed varieties / sustainable sprays			