

Podcast: Flower color, bees and biodiversity—how pollinators drive plant evolution

Genetics Unzipped host Kat Arney and reporter Graihagh Jackson lose themselves in the Valley of Hybridization in the Genetics Society's medal-winning garden at the RHS Chelsea Flower Show.

Surrounded by a sea of snapdragons, a DNA spiral made of peas and a modern day Mendel wielding a pipette, Graihagh seeks out Professor Wendy Bickmore – the brains behind the project – and plant geneticist Greg Mellers to talk about the impact of plant hybrids on pollinators, and at what point something becomes a new species. Most people know that bees pollinate all sorts of important plants and food crops. But as Arney and Jackson explain, bees and plants have a surprisingly complicated relationship—one with important evolutionary implications.

Bees [rely on flower color](#) to search out the most nectar-rich plants in their environments. The buff-tailed bumblebee, for example, prefers violet flowers, [according to a 2007 study](#). This preference for certain flower colors over others dictates which plants are fertilized and thus controls the kinds of hybrid plants that develop in the wild. These hybrids display new flower color variations—due to their unique genetics—that again influence which plants bees pollinate. Repeated year after year, this complex interplay between plants and pollinators has an important role in producing the biodiversity we see around the world.

<https://geneticliteracyproject.org/wp-content/uploads/2019/06/015-Up-The-Garden-Path-Genetics-Unzipped.mp3>

Professor Wendy Bickmore is a leading British genome scientist, Director of the MRC Human Genetics Unit at the University of Edinburgh, UK, and President of The Genetics Society from 2015-2018. Twitter: [@Wendy_Bickmore](#)

Dr Greg Mellers is a postdoctoral research fellow working on plant genetics and selection at the National Institute for Agricultural Botany in Cambridge, UK. Twitter: [@G_Mellers](#)

[Full transcript, credits and show notes here.](#)

Genetics Unzipped is presented by award-winning science communicator and biologist [Kat Arney](#) and produced by [First Create the Media](#) for the UK [Genetics Society](#). Follow Kat on Twitter [@Kat_Arney](#) and Genetics Unzipped [@geneticsunzip](#)

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