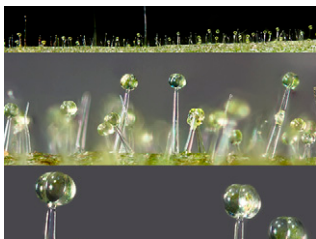


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**ON THE COVER**



Glandular trichomes are important for the defenses of plants against herbivorous arthropods, not only as physical barriers but also by producing specialized metabolites, such as volatile terpenes. These terpenes can either be deterrent or toxic to the herbivores or can attract their enemies. Xu et al (pages 2988–3005) show that the transcription factor SIMYC1 is essential for tomato to develop type VI glandular trichomes properly and to regulate volatile terpene biosynthesis. The cover image shows tomato type VI glandular trichomes, on top as an overview on a stem, and in the middle and on the bottom as close ups showing the four glandular cells that form the gland on top of the intermediate cell of the stalk (Photo by Jan van Arkel and Merijn Kant, UvA).

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