

Supplementary Material for the web: Companion music playlist

Songs in my music library inspired the headings of this review. Below is a companion song playlist to the article and a brief description of how these songs somehow relate to pathogen effectors. I certainly hope this exercise is amusing but perhaps the playlist would also serve as a mnemonic to students. The playlist is available as an iMix on the iTunes Store (search with article title or click on <http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewIMix?id=214823884>).

Groovy Times, The Clash - One dictionary definition of groovy is “fashionable and exciting”. This is undoubtedly the case right now for the study of filamentous pathogen effectors.

Down Under, Men at Work - Haustoria at work is a play on Men at Work, the popular Australian rock band of the 1980s. I picked it in homage to Peter Dodds, Ann-Maree Catanzariti, Jeff Ellis and their Australian colleagues for their outstanding work on flax rust effectors. It is also meant to emphasize the novel effector delivery function they ascribed to haustoria.

You're In My Heart, Rod Stewart - You're in my heart is meant to stress that *Uf*-RTP1 targets the plant cell in its “heart”, the nucleus.

Out Of Nowhere, Paul Desmond - *AvrLm1* is indeed out of nowhere having no similarity to other genes, exhibiting an atypically low GC content, and being the single gene in a 260 kb region.

One More Night, Phil Collins, No Jacket Required (Album) - No signal required was inspired from the title of this outstanding LP of Phil Collins “No Jacket Required”.

More Than I Can Bear, Matt Bianco - These hundreds of RXLR effectors are driving oomycete researchers crazy. There are so many. This is more than I can bear!

New Kid In Town, The Eagles - Although much attention has been devoted to RXLR effectors in the last two years, the CRNs are certain to receive some significant attention in the future. They are the new kids (effectors) in town.

Your Latest Trick, Dire Straits - A beautiful song from the wonderful “Brothers in Arm” album. Your latest trick is also a vivid illustration of arms race interactions.

Vein Melter, Herbie Hancock - *Six1* functions in the xylem where it triggers avirulence and hypersensitivity. Definitely a vein melter!

Counter Punch, Bobby Kalphat - The title of this joyful reggae piece, adapted from Dave Brubeck's classic Take Five, provides an appropriate illustration of the counterdefense activities of effectors like protease inhibitors.

Ray Of Light, Madonna - Deciphering the virulence function of effectors offers a ray of light for understanding pathogenicity.

Freaky Girl, Shaggy - Those two *Avr* genes are freaky indeed. Not only do they have an unusual mechanism of action but they also exhibit huge size and complexity. Genetically, it cannot get more freakish than those copy number variations of *pi3.4*.