1. Presentation of data on ESDAC:

*Introduction:*

* The data set on 'permanent crops' was made available by the EFSA working group on PECs in soil in alignment with the EFSA guidance document for predicting environmental concentrations of active substances of plant protection products and transformation products of these active substances in soil (EFSA, 2017). The data are documented in Beulke et al. (2015) and EFSA (2017, Appendix B.5).

*Documentation of the data:*

* The data set on 'permanent crops' covers the crop distribution of vines, olives, permanent grassland, apples, bush berries, hops and citrus in the entire EU. In alignment with the EFSA-CAPRI crop data the permanent crop data are rasterized to the EFSA specifications. Vines, olives and permanent grassland are considered to be appropriately represented by Corine Land Cover Classes 2.2.1. (vineyards), 2.2.3. (olive groves) and 2.3.1. (pastures). All other permanent crops (i.e. apples, bush berries, hops and citrus) are considered to be lumped into Corine Land Cover Class 2.2.2. (‘fruit trees and berry plantations’). So first, the EFSA spatial dataset raster (Inspire, 1 km2 raster) was overlaid with the Corine Land Cover 2012 (shape file, version 18.5, 02/2016) in order to obtain ready-to-use crop area maps for vines, olives and permanent grassland. Next, the EFSA spatial data raster was overlaid with a polygon file on permanent crops (EFSA\_polygonsv3, shape file, version 10/03/2015) provided by Beulke et al. (2015) to determine the dominant (largest) polygon for each individual raster cell. Only raster cells covered by one of these polygons as well as by Corine Land Cover code 222 were processed further. Crop areas for pome fruits, stone fruits, bush berries, hops and citrus for each individual polygon are provided by Beulke et al. (2015) in an dedicated MS EXCEL file (AreasPermanentCrops, version 03/04/2015). Based on this information, polygon specific scaling factors covering each of these five crops were calculated. On basis of the dominant polygon, these scaling factors were applied to the total area covered by Corine Land Cover Code 222 for each individual raster cell, obtaining ready-to-use crop area maps for apples, bush berries, hops and citrus. In the final dataset pome and stone fruits were lumped together into one crop (i.e. apples).

*Helpdesk – Contacts:*

* For additional information on the data, please contact Mark.EGSMOSE@efsa.europa.eu, European Food Safety Authority.
* For any technical problem with the data, please contact EC ESDAC (EC-ESDAC@ec.europa.eu), JRC.
* For any problem or question related to the PERSAM tool, please contact marc.van-liedekerke@ec.europa.eu, JRC.

*Reference of source (Citations):*

* EFSA, 2017. EFSA guidance document for predicting environmental concentrations of active substances of plant protection products and transformation products of these active substances in soil. EFSA Journal 2017;15(10):4982, 115 pp. https://doi: 10.2903/j.efsa.2017.4982
* Beulke S, De Wilde T, Balderacchi M, Garreyn F, Van Beinum W and Trevisan M, 2015. Scenario selection and scenario parameterisation for permanent crops and row crops on ridges in support of predicting environmental concentrations of plant protection products and their transformation products in soil. EFSA supporting publication 2015:EN-813, 170 pp.