



Report on nutritional quality of pollen

Deliverable 2.4

November 2021

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PoshBee

**Pan-european assessment, monitoring, and mitigation
of stressors on the health of bees**



Prepared under contract from the European Commission

Grant agreement No. 773921

EU Horizon 2020 Research and Innovation action

Project acronym: **PoshBee**
 Project full title: **Pan-european assessment, monitoring, and mitigation of stressors on the health of bees**
 Start of the project: June 2018
 Duration: 60 months
 Project coordinator: Professor Mark Brown
 Royal Holloway, University of London
www.poshbee.eu

Deliverable title: Report on the nutritional quality of pollen
 Deliverable n°: D2.4
 Nature of the deliverable: Report
 Dissemination level: Public

WP responsible: WP2
 Lead beneficiary: UMONS

Citation: Michez, D., Barraud, A., Lefebvre, V. (2021). *Report on the nutritional quality of pollen*. Deliverable D2.4 EU Horizon 2020 PoshBee Project, Grant agreement No. 773921.

Due date of deliverable: Month n° 42
 Actual submission date: Month n° 42

Deliverable status:

Version	Status	Date	Author(s)
1.0	Final	29 November 2021	D. Michez, A. Barraud, V., Lefebvre UMONS

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Summary

Current global changes negatively impact insect pollinators, which directly impacts the pollination of wild and domesticated flowering plants and the functioning of ecosystems. Amongst these threats, many synergistic drivers, such as habitat destruction and fragmentation, increasing use of agrochemicals, decreasing resource diversity, as well as climate change, are known to affect wild and managed bees. All these drivers potentially have a direct or indirect impact on the nutritional quality of pollen collected by female bees to feed their larvae. This report contains an extensive dataset of the chemical composition of pollen collected by the European honeybee (*Apis mellifera*), the buff-tailed bumble bee (*Bombus terrestris*), and the red mason bee (*Osmia bicornis*) sampled at 128 sites across eight European countries in landscape gradients dominated by two major bee-pollinated crops (apple and oilseed rape). The data offer the opportunity to test whether variation in the nutritional quality of pollen diet is structured by species-specific traits, environmental factors, and/or drivers of global change. We show that the bees were able to collect resources of similar chemical qualities in the 8 countries. We also show that the three species collected resources of similar values in terms of total protein concentration but different lipid concentration. These preliminary results confirm the hypothesis of interspecific variation in nutritional requirement of bees.

1. Introduction

Losses and declines in managed and wild bee populations have been reported worldwide (Cameron *et al.*, 2011; Goulson *et al.*, 2015; Duchenne *et al.*, 2020). Habitat loss and agricultural intensification, resulting in landscape simplification, have been identified as important drivers of pollinator decline (Winfree, 2010; Vray *et al.*, 2019). These factors can directly or indirectly affect the quality, quantity and the diversity of floral resources and thus the food sources of bees (e.g. Roger *et al.*, 2017b). This makes the abundance, distribution/availability, quality and diversity of these resources potentially the main proximal pressure explaining bee population trends (Roulston & Goodell, 2011).

Chemical composition of pollen is very complex and highly diverse among flowering plants (Carnell *et al.*, 2020; Table 1). Bees obtain their carbohydrate nutrient intake mainly from nectar, but their protein and lipid from pollen (Human & Nicolson, 2006; Roulston & Cane, 2000). The chemical composition of pollen is also highly variable in these two compounds, between 2-60% and 1-20% for protein and lipid contents, respectively (Roulston & Cane, 2000; Carnell *et al.*, 2020; Vaudo *et al.*, 2020) (Table 1). Field and semi-field studies showed that this chemical composition can be related to bee health (e.g., honey bee *A. mellifera*: Alaux *et al.* (2010); di Pasquale *et al.*, (2013); mason bee *Osmia bicornis*: Bukovinszky *et al.* (2017)). Generalist bees seem able to assess pollen chemical quality and balance multiple macronutrient resources when making foraging decisions (Vaudo *et al.*, 2016; Kraus *et al.*, 2019). Based on a large quantity and diversity of samples, Vaudo *et al.* (2020) showed that honey bees collected pollen between 1:1 and 2:1 protein to lipid (P:L) ratios. This species appears to occupy a different nutritional space compared to *Bombus impatiens* and *Osmia cornifrons*, which collect at a P:L ratio of 4:1. Furthermore, to satisfy the food intake of colonies with numerous individuals, honey bees must collect large amounts of pollen. Therefore, honey bees collect pollen from generalist, open floral morphologies such as mass blooming trees (e.g. *Quercus* sp., *Salix* sp., *Prunus* sp.) and wild herbs with high production of pollen (e.g. Asteraceae), which may have a nutritional make up that falls in the lower P:L values (i.e. 1-3:1 P:L) (Vaudo *et al.*, 2020). Bumble bees appear much more picky in their choices, many species mainly forage on Fabaceae pollen showing a high P:L ratio value (3.8 ± 0.5) (Leonhardt & Blüthgen, 2012). In contrast to honey bees and bumble bees, *Osmia cornifrons*, a solitary foraging bee with a short flight period, has mixed preferences for Rosaceae and Fabaceae pollen ((Haider *et al.*, 2014)). Interestingly, the average P:L ratios of Rosaceae (1.6 ± 0.3 P:L) and Fabaceae

($3.8 \pm 0.5P:L$) are similar to the average P:L value preferred by *O. cornifrons* ($\sim 2.9 P:L$) (Vaudo *et al.*, 2020).

Regarding chemical profiles, particular lipids and proteins seem more important to bee nutritional requirements. For example, sterols (e.g. β -sitosterol) are essential to synthesise ecdysteroid, which is involved in larval moulting and the maturation of the ovaries in adult females. In the case of sterol deficiency, a delay in moulting can be observed (Regali, 1996). Additionally, a good amino acid balance is crucial for the bee development (Moerman *et al.*, 2017). Amino acids are involved in growth, survival, flight ability, and immunity (Carter *et al.*, 2006; Moerman *et al.*, 2017; Regali, 1996; Roger *et al.*, 2017a). Some amino acids (methionine, lysine, threonine, histidine, leucine, isoleucine, valine, phenylalanine, tryptophan) and sterols (24-methylenecholesterol and β -sitosterol) cannot be synthesised by bees and are therefore considered as essential, meaning that it is necessary to obtain them through pollen consumption (de Groot, 1953).

Experimental studies in controlled conditions have confirmed that the nutritional quality of pollen (e.g., the concentration of protein and lipids) can have an impact on the development and mortality of bumble bees (e.g. Barraud *et al.*, 2020; Carnell *et al.*, 2020; Moerman *et al.*, 2017; Vanderplanck *et al.*, 2014) and mason bees (Eckhardt *et al.*, 2014; Sedivy *et al.*, 2011). The floral diversity of pollen diets does not seem to be the major factor of quality, as bumble bees develop better on high-quality monofloral diets compared to low-quality polyfloral diets (Moerman *et al.*, 2017; Carnell, Hulse and Hughes, 2020). The pattern for honey bees appears to be similar at an individual level, with pollen quality (reflected by protein content) having an impact on the physiology and survival of adult honey bees (Brodschneider and Crailsheim, 2010; Di Pasquale *et al.*, 2013; Frias *et al.* 2016).

Overall, these results suggest that a loss of a part of the plant community, especially the families covering specific physiological requirement (i.e., Fabaceae), is more likely to affect bumble bees and solitary bees than honey bees (Leonhardt & Blüthgen, 2012). The more generalised the foraging behaviour of a particular bee species, the more likely it is to be able to switch to alternative host plants and persist in an area, even if those host plants are of a lower nutritional quality (Roger *et al.*, 2017b). However, there are very few studies evaluating and comparing the development of various generalist bee species in controlled conditions on the same pollen diets (Moerman *et al.*, 2017), and no study considering a broad diversity of bee clades (e.g. different bee tribes or bee families) in field conditions.

Table 1. Chemical components of pollen (updated from Carnell *et al.* 2020)

Components	Examples	Natural variation in the wild	Can be detected by bees?	Main references
Proteins	Enzymes (e.g. oxidases, lyases, ...)	2-60%	YES	Roulston and Cane (2000); Vaudo <i>et al.</i> (2020)
Amino acids	Proline, glutamine, tryptophan	All or most are present, <2% each	YES	Carter <i>et al.</i> 1999; Roger <i>et al.</i> (2017a)
Lipids	Fatty acids	1-20%	YES	Vaudo <i>et al.</i> (2020)
Sterols	β -sitosterol	Highly variable	YES	Vanderplanck <i>et al.</i> (2011)
Specialised metabolites	Alkaloids, phenolics, tanins	Highly variable	YES	Gosselin <i>et al.</i> (2013); Wang <i>et al.</i> , 2019

The present study reports results from the analyses of pollen collected by three species of commercially produced 'sentinel' bees (*Apis mellifera*, *Bombus terrestris* and *Osmia bicornis*) within two mass-flowering crops, apples and oilseed rape, in eight countries: Ireland, UK, Spain, Germany, Sweden, Estonia, Switzerland and Italy. This report is a part of a global study aiming to gain a holistic picture of the multiple environmental and biotic stressors encountered by bees occurring in

representative agricultural landscapes in each of the participating countries. To meet this aim a full suite of measurements was planned to encapsulate the variation in habitat quality, the abundance of flowering plants, the diversity of chemical pollutants present on the bees themselves and in their food resources, and the frequency and co-occurrence of colony pests and pathogens, that bees encountered under typical field conditions.

2. Methodology

2.1 Overview of the study

This study was carried out in the framework of the Horizon 2020 project PoshBee (<http://poshbee.eu>), which aims to support healthy bee populations, sustainable beekeeping and pollination in Europe. The goal of Work Package 1 (WP1) is described as “developing a site network for assessing exposure of bees to chemical, nutritional, and pathogen stressors” and led by Trinity College Dublin (Ireland). WP1 also includes 30 additional collaborators across 14 European countries (<http://poshbee.eu/partners>). The goal of PoshBee Work Package 2 (WP2) is described as “measuring chemical exposure, pathogens and aspects of nutrition in honey bees, bumble bees and solitary bees” and is led by the *Agence Nationale de la Sécurité Sanitaire de l'alimentation, de l'environnement et du travail* (ANSES, France). WP2 also includes seven additional beneficiaries across five countries. Apple orchard sites and winter-sown oilseed rape sites were selected according to a gradient of land-use intensity in each of eight countries chosen to represent four major European biogeographical areas: Boreal (Sweden and Estonia), Atlantic (Ireland and United Kingdom), Continental (Germany and Switzerland) and Mediterranean (Spain and Italy). These two crops show contrasting growing systems and pollination biology: apple (*Malus domestica*), a perennial, self-incompatible crop grown in long standing (5-10 year) orchard plantations and winter-sown oilseed rape (*Brassica napus*), an annual, self-compatible crop planted irregularly as a break crop in arable rotations. There were eight sampling sites for each type of crop in each country. Thus, a total of 128 sites were selected along a gradient of land use intensity (see Vanderplanck *et al.* (2021) for dataset on landcover and management). All sites were surveyed using the same methods as part of the European Union PoshBee project (<http://poshbee.eu>), standardised following the PoshBee protocols (Hodge & Stout, 2019).

2.2 Collection and preparation of pollen samples

Three honeybee hives (*A. mellifera*), three *B. terrestris* colonies and 3 nest boxes (each with 100 cocoons) of *O. bicornis* were placed in each site (except for *Osmia*, see table 2) and standardised following internal PoshBee protocols (Hodge and Stout 2019). *Apis mellifera* colonies were provided by local suppliers, representing local races (Hodge *et al.*, in prep; Table 2 for details about the honey bee subspecies). All bumble bee colonies were purchased from local suppliers, and represented the local wild subspecies. For 6 of the 8 countries this was a single continental *B. terrestris* population, but for Ireland and the UK it was a single *B. terrestris audax* population. All *Osmia* cocoons were provided by Wildbiene & Partner (Switzerland) at no cost to the project.

Table 2. Summary of species and subspecies used in the different countries. APP = Apple trees, OSR = Oil-seed rape.

COUNTRIES	<i>Apis mellifera</i> subspecies	<i>Bombus terrestris</i> subspecies	<i>Osmia bicornis</i>
Estonia (EST)	<i>A. m. ligustica</i>	<i>B. t. terrestris</i>	<i>O. bicornis</i>
Germany (GER)	APP: <i>A. m. carnica</i> OSR: <i>A. m. mellifera</i>	<i>B. t. terrestris</i> <i>B. t. terrestris</i>	<i>O. bicornis</i> <i>O. bicornis</i>
Great Britain (GBR)	APP: <i>A. m. mixed</i> OSR: <i>A. m. buckfast</i>	<i>B. t. audax</i> <i>B. t. audax</i>	None None
Ireland (IRL)	<i>A. m. mellifera</i>	<i>B. t. audax</i>	None
Italy (ITA)	<i>A. m. ligustica</i>	<i>B. t. terrestris</i>	<i>O. bicornis</i>
Switzerland (CHE)	<i>A. m. carnica</i>	<i>B. t. terrestris</i>	<i>O. bicornis</i>
Spain (ESP)	<i>A. m. iberiensis</i>	<i>B. t. terrestris</i>	<i>O. bicornis</i>
Sweden (SWE)	<i>A. m. mixed</i>	<i>B. t. terrestris</i>	<i>O. bicornis</i>

Pollen bread from nests were collected around the peak of the flowering season of the focal crop. Pollen bread from western honey bees were collected in the *Apis* hives (Fig. 1A). Pollen bread from bumble bees were collected in the bumblebee colony (Fig. 1B). Pollen from *Osmia* was collected from 10 nest tubes before the larvae ate all the stored pollen (Fig. 1C). Overall we aimed to collect 384 pollen samples (8 countries, 2 crops, 8 sites, 3 species).

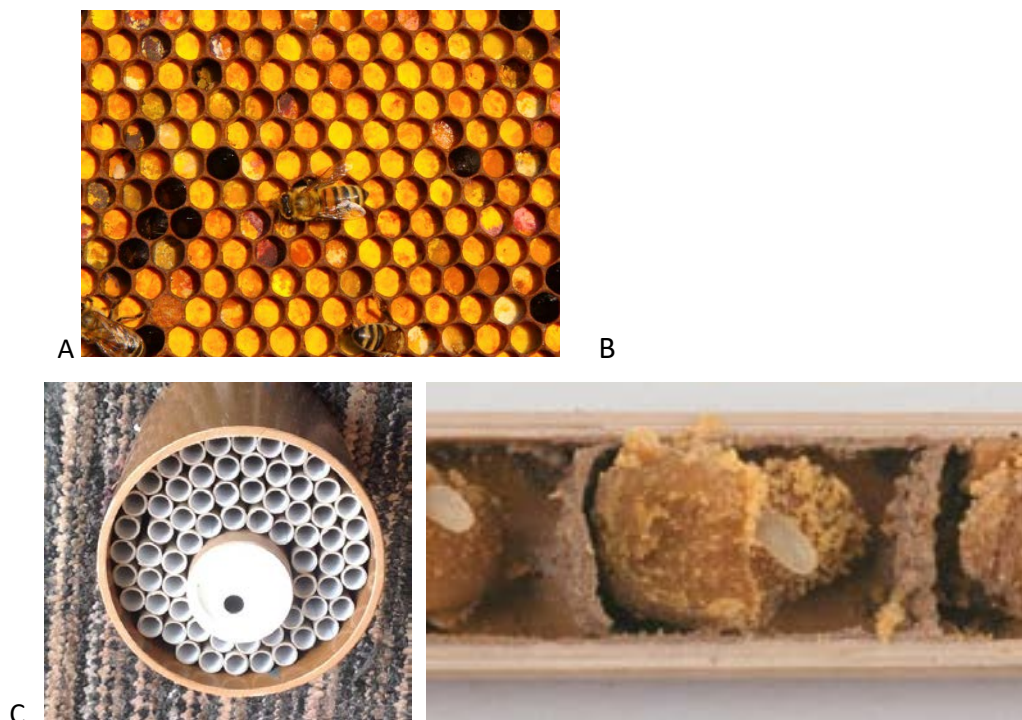


Figure 1. Nest and device to collect pollen. A. Pollen stored in honey bee hive. B. Bumble bee colony with queen and workers. C. *Osmia bicornis* nest with the central chambers loaded with cocoons and a view in the nest with pollen

All samples were weighed before freezing at -20°C. Sample homogenization was conducted by PIWET before preparing sub-samples for palynological (CREA) and chemical analyses (UMONS). Thanks to homogenization, all analyses are related to exactly the same samples of pollen bread (or pollen loads) and the results obtained from their analysis complement each other.

2.3 Sample analyses

Nutrition was evaluated based on beebread from the nests of honey bees, bumble bees and solitary bees from the site network (WP1). Nutritional aspects were addressed through the identification of botanical origin of pollen and the characterisation of total protein, total lipid, and total glucid (Table S1). Analyses of amino acids (total concentration, essential amino acid concentration and global profile) and sterols (total concentration and global profile) were challenged by the Covid pandemic in terms of access to the laboratory and late delivery of some analytical material. These are still running (Table S2).

2.3.1 Protein analyses

Pollen protein concentration was measured using the Bradford assay according to Vaudo *et al.* (2020). We added 1.5mL of 0.1M NaOH to ~1mg of pollen sample. We conducted the Bradford assay with the Bio-Rad Protein Assay Kit microassay 300 µL microplate protocol using bovine γ-globulin as the protein standard (Bio-Rad Laboratories, Inc., Hercules, CA). We used three technical replicates for each biological replicate and measured absorbance at 595nm using a SpectraMax 190 spectrophotometer (Molecular Devices, LLC, Sunnyvale, CA). Protein concentrations were calculated using linear regression analysis from the protein standards.

2.3.2 Lipid analyses

Pollen lipid concentrations were determined using a modified protocol from Van Handel and Day (1988). In 2.0mL microcentrifuge tubes, we added 200µL 2% sodium sulfate and 1.6mL chloroform/methanol to ~1mg of each pollen sample before a 5 min centrifugation. Supernatant was transferred to a clean glass tube with 600µL DI water, and centrifuged for 5 min. We separated the top carbohydrate/water/methanol fraction and the remaining chloroform fraction was used for lipid analysis. The lipid/chloroform fraction was left overnight in a fume hood to completely evaporate the solvent. We added 200µL sulfuric acid to the sample and heated at 100°C for 10min. Then, 5mL of vanillin/phosphoric acid reagent was added. We used three 300µL technical replicates for each biological replicate and measured absorbance at 525nm. Lipid concentrations were calculated using linear regression analysis from vegetable oil standards. Pollen concentrations of proteins and lipids are reported as µg nutrient/mg pollen, and subsequent P:L ratios were determined for each diet.

2.3.3 Glucid analyses

For carbohydrate analysis, we heated each sample at 100°C to evaporate the solvent to ~100 µL. We added anthrone/sulfuric acid reagent to bring each sample to 5 mL and heated the samples at 100°C for 17 min. Each sample was removed from the heat and allowed to cool. We used two technical replicates for each biological replicate and measured absorbance at 625 nm using a SpectraMax 190 spectrophotometer (Molecular Devices). Carbohydrate concentrations were calculated using simple linear regression analysis from anhydrous glucose standards using SoftMax Pro v.4.0 software.

2.3.4 Amino acids analyses

For the analysis of total amino acids, 1mL of hydrolysis solution (6N HCl, 0.1% phenol and 500 µM norleucine) was added to 3–5 mg (dry weight) of pollen (Vanderplanck *et al.*, 2014) and then incubated for 24 hours at 110°C. The hydrolysate was evaporated until dryness under vacuum in a boiling bath at 100°C. Afterwards, 1 mL of the sodium citrate buffer pH 2.2 was added into the tube. The sample

solution was poured into an HPLC vial after filtration (0.2 µm filter), and each amino acid was measured separately with an ion-exchange chromatograph. A post-column ninhydrin reaction produced coloured derivatives, which was monitored via a UV detector. For amino acid quantification, norleucine was used as the internal standard. This analysis includes essential amino acids that bees cannot synthesize, as well as the non-essential ones. The essential amino acids were originally determined by de Groot (1953) for honey bees, and they are arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.

2.3.5 Sterol analyses

Before each analysis, pollen samples were divided into a minimum of three samples (i.e., 20 mg per analytical replicate). Sterols were quantified by GC-FID after extraction and purification according to the method described by Vanderplanck *et al.* (2011). The multi-step procedure can be summarized as follows: (i) saponification with 2M methanolic potassium hydroxide, (ii) extraction of the unsaponifiable portion with diethylether and several water washings, (iii) solvent evaporation, (iv) fractionation of the unsaponifiable portion by TLC, (v) trimethylsilylation of the sterols (scraped from the silicagel) and (vi) separation by GC. The total sterol content was determined considering all peaks above the limit of quantification; LOQ = 9.6 ng/1.2 µl injected) whose retention times were between cholesterol and betulin (internal standard). Individual sterols were quantified on the basis of peak areas from analyses. Under the present analytical conditions applied, campesterol and 24-methylenecholesterol co-eluted. Therefore, the results are pooled for these two compounds. Compounds were identified according to their retention times by comparison with those of sunflower oil as reference. The identifications were corroborated by GC-FID (Vanderplanck *et al.*, 2011).

2.4 Data management and analyses

All results available by 17/11/2021 were included in the common data bank of the WP2 results managed by the PoshBee consortium (i.e. Poshbase). We present here a simple description of the dataset. Detailed analyses of the data set will be developed in future publications.

3 Results and preliminary discussion

Overall 329 samples were collected and analysed in analytical triplicate when possible (Table S1). We missed 32 samples that were not collected for *Osmia* in two countries (Table 2). Analyses of amino acids and sterols will be partly finished by December 2021 (Table S2).

Values of total protein were quite stable in the 8 countries when considering data aggregation of pollen from *Apis* and *Bombus* in all sites and both crops in the same country (Fig. 2A). The potential access to protein in different agro-ecosystems seems to be quite stable, as mentioned in Roger *et al.* (2017a). On the contrary, values of total lipids and glucids were quite variable among countries and agro-ecosystems (Figs 2B-C).

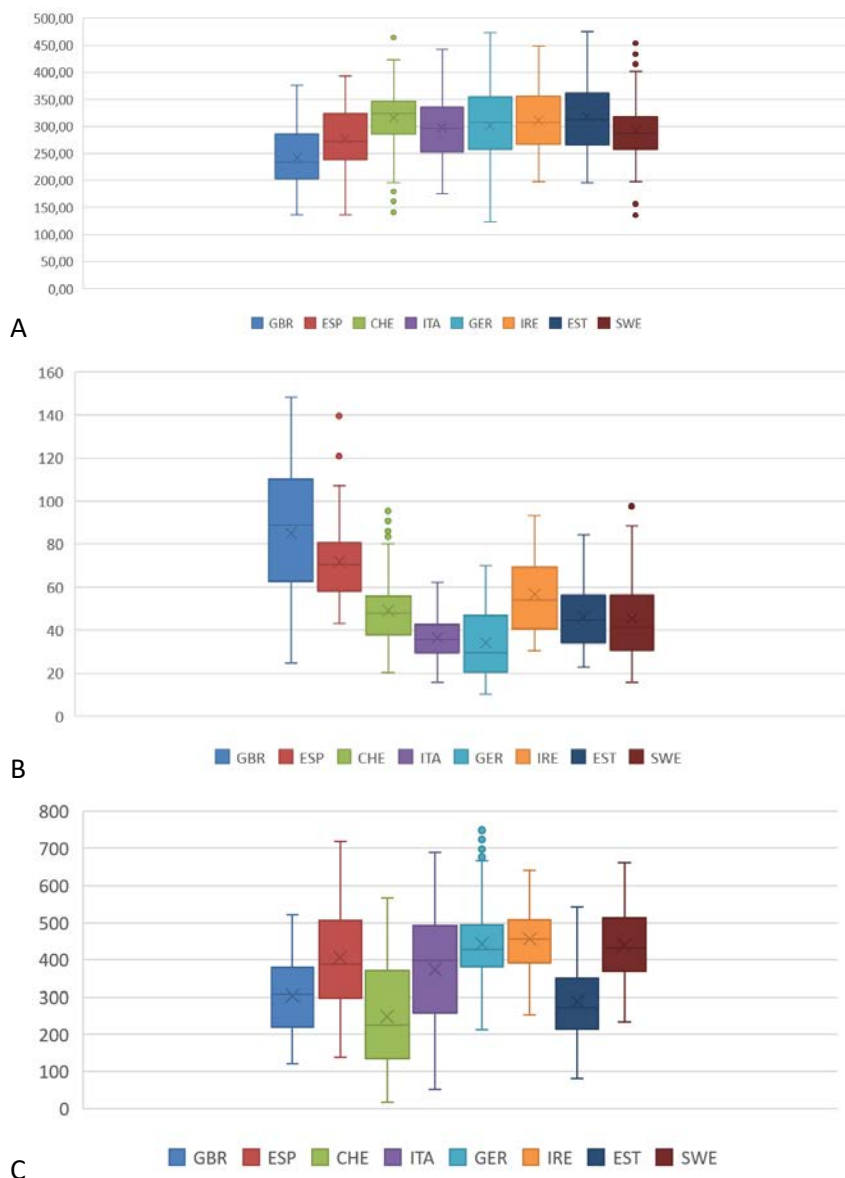


Figure 2. A. Total protein content ($\mu\text{g}/\text{mg}$) average per species per country (aggregation of data from *Apis* and *Bombus*). B. Total lipid content ($\mu\text{g}/\text{mg}$) average per species per country (aggregation of data from *Apis* and *Bombus*). C. Total glucid content ($\mu\text{g}/\text{mg}$) average per species per country (aggregation of data from *Apis* and *Bombus*).

Constancy in protein and glucid values but variation in lipid values was found when we analysed the data at the species level (Figs 3A-C). Moreover, as expected from previous literature, the protein:lipid ratio is twice as low in the diet of *Apis* compared to the diet of *Bombus* (Vaudo *et al.* 2020) even if we considered *Bombus terrestris* instead of *Bombus impatiens*. As floral choices are quite conserved in bumble bees (Wood *et al.* 2021), the nutritional requirement may also be conserved.

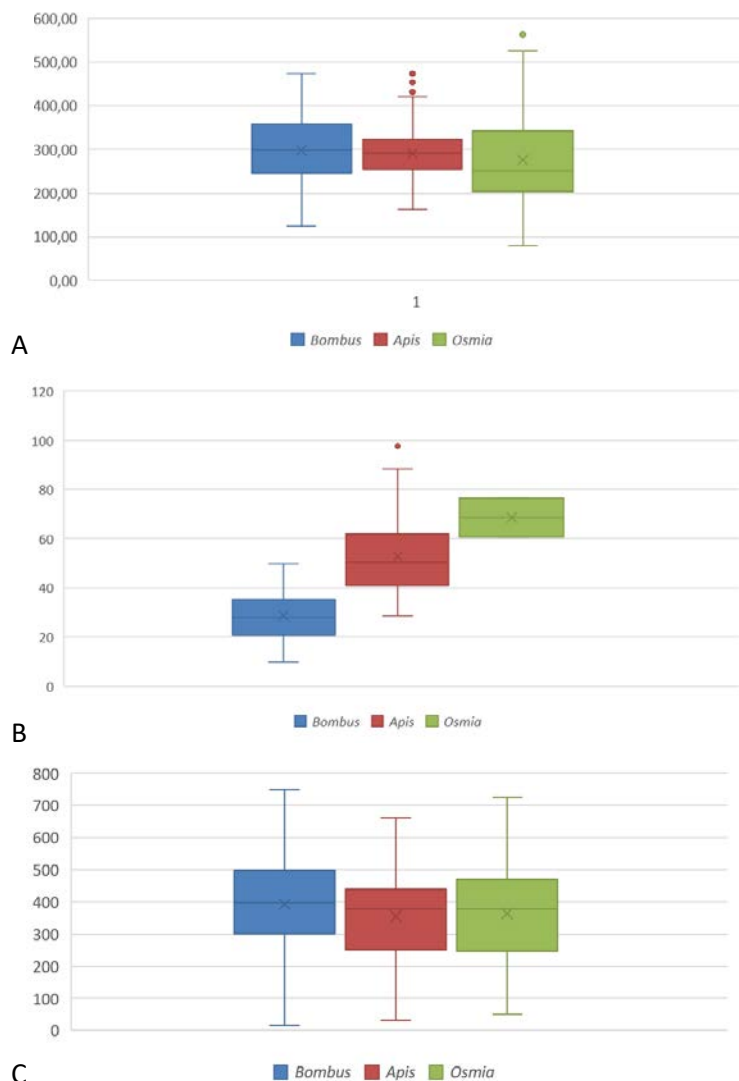


Figure 3. A. Total protein content ($\mu\text{g}/\text{mg}$) average for *Bombus*, *Apis* and *Osmia*. B. Total lipid content ($\mu\text{g}/\text{mg}$) average for *Bombus*, *Apis* and *Osmia*. C. Total glucid content ($\mu\text{g}/\text{mg}$) average for *Bombus*, *Apis* and *Osmia*.

Among the three tested species, the lowest ratio P:L is found for *Osmia*, while it had an intermediate position in the study of Vaudo *et al.* (2020) (i.e. between *Apis* and *Bombus*). This difference might be due to the fact that Vaudo *et al.* (2020) considered *Osmia cornifrons*, while we analysed the pollen diet of *Osmia bicornis*. Floral choices in the genus *Osmia* seem much more variable than in the genus *Bombus* (Praz *et al.*, 2008). This might explain the difference in protein:lipid ratio in the pollen diet of *Osmia cornifrons* and *Osmia bicornis*.

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Table S1. Protein and lipid content.

ID sample	Field_label	Protein_content (µg/mg)	Lipid_content (µg/mg)
4216	GBR_OSR_01_BPS_03-07-2019	189,42	66,60791912
4216	GBR_OSR_01_BPS_03-07-2019	207,59	71,55993076
4216	GBR_OSR_01_BPS_03-07-2019	203,05	62,38187222
4216	GBR_OSR_01_BPS_03-07-2019	NA	NA
4216	GBR_OSR_01_BPS_03-07-2019	NA	NA
4217	GBR_OSR_02_BPS_03-07-2019	200,58	92,53643303
4217	GBR_OSR_02_BPS_03-07-2019	186,05	104,8137671
4217	GBR_OSR_02_BPS_03-07-2019	198,78	73,16774072
4217	GBR_OSR_02_BPS_03-07-2019	NA	NA
4217	GBR_OSR_02_BPS_03-07-2019	NA	NA
4218	GBR_OSR_03_BPS_04-07-2019	178,50	87,73825599
4218	GBR_OSR_03_BPS_04-07-2019	207,69	112,1382119
4218	GBR_OSR_03_BPS_04-07-2019	174,63	146,7965323
4218	GBR_OSR_03_BPS_04-07-2019	NA	NA
4218	GBR_OSR_03_BPS_04-07-2019	NA	NA
4219	GBR_OSR_04_BPS_25-06-2019	174,17	135,9867776
4219	GBR_OSR_04_BPS_25-06-2019	137,77	129,0082296
4219	GBR_OSR_04_BPS_25-06-2019	178,27	124,8915502
4219	GBR_OSR_04_BPS_25-06-2019	NA	NA
4219	GBR_OSR_04_BPS_25-06-2019	NA	NA
4220	GBR_OSR_05_BPS_04-07-2019	181,05	79,85562427
4220	GBR_OSR_05_BPS_04-07-2019	196,17	109,7676069
4220	GBR_OSR_05_BPS_04-07-2019	175,90	96,57347504
4220	GBR_OSR_05_BPS_04-07-2019	NA	NA
4220	GBR_OSR_05_BPS_04-07-2019	NA	NA
4221	GBR_OSR_06_BPS_24-06-2019	197,10	95,88323338
4221	GBR_OSR_06_BPS_24-06-2019	155,45	74,85909001
4221	GBR_OSR_06_BPS_24-06-2019	163,52	58,8657583
4221	GBR_OSR_06_BPS_24-06-2019	NA	NA
4221	GBR_OSR_06_BPS_24-06-2019	NA	NA
4222	GBR_OSR_07_BPS_27-06-2019	147,41	82,48515365
4222	GBR_OSR_07_BPS_27-06-2019	186,91	78,38115331
4222	GBR_OSR_07_BPS_27-06-2019	170,20	52,91385132
4222	GBR_OSR_07_BPS_27-06-2019	NA	NA
4222	GBR_OSR_07_BPS_27-06-2019	NA	NA
4223	GBR_OSR_08_BPS_24-06-2019	218,12	68,37333727
4223	GBR_OSR_08_BPS_24-06-2019	190,40	102,9369913
4223	GBR_OSR_08_BPS_24-06-2019	185,93	94,94491026
4223	GBR_OSR_08_BPS_24-06-2019	NA	NA
4223	GBR_OSR_08_BPS_24-06-2019	NA	NA
4224	GBR_APP_09_BPS_28-06-2019	225,69	25,21967523
4224	GBR_APP_09_BPS_28-06-2019	285,58	27,61874748
4224	GBR_APP_09_BPS_28-06-2019	251,33	26,65734638
4224	GBR_APP_09_BPS_28-06-2019	NA	NA
4224	GBR_APP_09_BPS_28-06-2019	NA	NA
4225	GBR_APP_11_BPS_08-07-2019	308,38	28,55687109
4225	GBR_APP_11_BPS_08-07-2019	275,00	33,44905159
4225	GBR_APP_11_BPS_08-07-2019	355,12	39,44745754
4225	GBR_APP_11_BPS_08-07-2019	NA	NA
4225	GBR_APP_11_BPS_08-07-2019	NA	NA

4226	GBR_APP_12_BPS_24-06-2019/05-07-2019	206,83	32,35639001
4226	GBR_APP_12_BPS_24-06-2019/05-07-2019	257,76	28,0689083
4226	GBR_APP_12_BPS_24-06-2019/05-07-2019	215,49	37,99036929
4226	GBR_APP_12_BPS_24-06-2019/05-07-2019	NA	NA
4226	GBR_APP_12_BPS_24-06-2019/05-07-2019	NA	NA
4227	GBR_APP_13_BPS_05-07-2019	290,72	28,33590336
4227	GBR_APP_13_BPS_05-07-2019	290,84	31,85042506
4227	GBR_APP_13_BPS_05-07-2019	261,38	33,53866358
4227	GBR_APP_13_BPS_05-07-2019	NA	NA
4227	GBR_APP_13_BPS_05-07-2019	NA	NA
4228	GBR_APP_14_BPS_05-07-2019	250,00	28,45567405
4228	GBR_APP_14_BPS_05-07-2019	255,09	24,72973377
4228	GBR_APP_14_BPS_05-07-2019	266,11	24,90993835
4228	GBR_APP_14_BPS_05-07-2019	NA	NA
4228	GBR_APP_14_BPS_05-07-2019	NA	NA
4229	GBR_APP_15_BPS_05-07-2019	222,28	35,73376931
4229	GBR_APP_15_BPS_05-07-2019	204,31	40,61052481
4229	GBR_APP_15_BPS_05-07-2019	248,46	34,36179407
4229	GBR_APP_15_BPS_05-07-2019	NA	NA
4229	GBR_APP_15_BPS_05-07-2019	NA	NA
4230	GBR_OSR_01_APS_27-05-2019	241,14	66,60791912
4230	GBR_OSR_01_APS_27-05-2019	245,05	71,55993076
4230	GBR_OSR_01_APS_27-05-2019	252,89	62,38187222
4230	GBR_OSR_01_APS_27-05-2019	NA	NA
4230	GBR_OSR_01_APS_27-05-2019	NA	NA
4231	GBR_OSR_02_APS_27-05-2019	375,73	92,53643303
4231	GBR_OSR_02_APS_27-05-2019	375,58	104,8137671
4231	GBR_OSR_02_APS_27-05-2019	372,77	73,16774072
4231	GBR_OSR_02_APS_27-05-2019	NA	NA
4231	GBR_OSR_02_APS_27-05-2019	NA	NA
4232	GBR_OSR_03_APS_27-05-2019	303,09	87,73825599
4232	GBR_OSR_03_APS_27-05-2019	290,75	112,1382119
4232	GBR_OSR_03_APS_27-05-2019	266,60	146,7965323
4232	GBR_OSR_03_APS_27-05-2019	NA	NA
4232	GBR_OSR_03_APS_27-05-2019	NA	NA
4233	GBR_OSR_04_APS_28-05-2019	355,32	135,9867776
4233	GBR_OSR_04_APS_28-05-2019	333,45	129,0082296
4233	GBR_OSR_04_APS_28-05-2019	326,49	124,8915502
4233	GBR_OSR_04_APS_28-05-2019	NA	NA
4233	GBR_OSR_04_APS_28-05-2019	NA	NA
4234	GBR_OSR_05_APS_27-05-2019	303,77	79,85562427
4234	GBR_OSR_05_APS_27-05-2019	300,03	109,7676069
4234	GBR_OSR_05_APS_27-05-2019	307,82	96,57347504
4234	GBR_OSR_05_APS_27-05-2019	NA	NA
4234	GBR_OSR_05_APS_27-05-2019	NA	NA
4235	GBR_OSR_06_APS_28-05-2019	351,80	81,50074838
4235	GBR_OSR_06_APS_28-05-2019	318,19	74,85909001
4235	GBR_OSR_06_APS_28-05-2019	315,11	69,25383329
4235	GBR_OSR_06_APS_28-05-2019	NA	NA
4235	GBR_OSR_06_APS_28-05-2019	NA	NA
4236	GBR_OSR_07_APS_28-05-2019	292,16	82,48515365
4236	GBR_OSR_07_APS_28-05-2019	273,24	78,38115331
4236	GBR_OSR_07_APS_28-05-2019	233,80	52,91385132
4236	GBR_OSR_07_APS_28-05-2019	NA	NA
4236	GBR_OSR_07_APS_28-05-2019	NA	NA

4237	GBR_OSR_08_APS_28-05-2019	278,06	68,37333727
4237	GBR_OSR_08_APS_28-05-2019	294,83	102,9369913
4237	GBR_OSR_08_APS_28-05-2019	289,14	94,94491026
4237	GBR_OSR_08_APS_28-05-2019	NA	NA
4237	GBR_OSR_08_APS_28-05-2019	NA	NA
4238	GBR_APP_09_APS_23-05-2019	222,32	148,2562109
4238	GBR_APP_09_APS_23-05-2019	229,34	138,9587611
4238	GBR_APP_09_APS_23-05-2019	203,11	112,8020662
4238	GBR_APP_09_APS_23-05-2019	NA	NA
4238	GBR_APP_09_APS_23-05-2019	NA	NA
4239	GBR_APP_10_APS_23-05-2019	198,68	120,322204
4239	GBR_APP_10_APS_23-05-2019	237,58	105,5143863
4239	GBR_APP_10_APS_23-05-2019	220,90	141,5971459
4239	GBR_APP_10_APS_23-05-2019	NA	NA
4239	GBR_APP_10_APS_23-05-2019	NA	NA
4240	GBR_APP_11_APS_23-05-2019	207,46	115,9814233
4240	GBR_APP_11_APS_23-05-2019	262,24	147,6204484
4240	GBR_APP_11_APS_23-05-2019	229,66	114,9590249
4240	GBR_APP_11_APS_23-05-2019	NA	NA
4240	GBR_APP_11_APS_23-05-2019	NA	NA
4241	GBR_APP_12_APS_22-05-2019	218,99	87,43873682
4241	GBR_APP_12_APS_22-05-2019	263,63	108,7614008
4241	GBR_APP_12_APS_22-05-2019	223,76	95,44166649
4241	GBR_APP_12_APS_22-05-2019	NA	NA
4241	GBR_APP_12_APS_22-05-2019	NA	NA
4242	GBR_APP_13_APS_23-05-2019	255,35	90,09870821
4242	GBR_APP_13_APS_23-05-2019	233,09	92,34893713
4242	GBR_APP_13_APS_23-05-2019	250,62	90,92764193
4242	GBR_APP_13_APS_23-05-2019	NA	NA
4242	GBR_APP_13_APS_23-05-2019	NA	NA
4243	GBR_APP_14_APS_22-05-2019	287,15	117,5695841
4243	GBR_APP_14_APS_22-05-2019	217,60	90,55638708
4243	GBR_APP_14_APS_22-05-2019	182,22	82,07143818
4243	GBR_APP_14_APS_22-05-2019	NA	NA
4243	GBR_APP_14_APS_22-05-2019	NA	NA
4244	GBR_APP_15_APS_22-05-2019	217,40	103,9933349
4244	GBR_APP_15_APS_22-05-2019	214,61	120,9747605
4244	GBR_APP_15_APS_22-05-2019	245,15	124,1492948
4244	GBR_APP_15_APS_22-05-2019	NA	NA
4244	GBR_APP_15_APS_22-05-2019	NA	NA
4245	GBR_APP_16_APS_22-05-2019	235,28	110,3127293
4245	GBR_APP_16_APS_22-05-2019	231,11	98,69899204
4245	GBR_APP_16_APS_22-05-2019	214,41	108,2813533
4245	GBR_APP_16_APS_22-05-2019	NA	NA
4245	GBR_APP_16_APS_22-05-2019	NA	NA
4246	ESP_OSR_01_A_APS_23-05-2019	271,01	74,09273219
4246	ESP_OSR_01_A_APS_23-05-2019	285,87	66,48294636
4246	ESP_OSR_01_A_APS_23-05-2019	242,89	71,57722382
4246	ESP_OSR_01_A_APS_23-05-2019	NA	NA
4246	ESP_OSR_01_A_APS_23-05-2019	NA	NA
4247	ESP_OSR_02_A_APS_27-05-2019	312,20	79,78576892
4247	ESP_OSR_02_A_APS_27-05-2019	258,46	64,97587142
4247	ESP_OSR_02_A_APS_27-05-2019	266,49	69,3245961
4247	ESP_OSR_02_A_APS_27-05-2019	NA	NA
4247	ESP_OSR_02_A_APS_27-05-2019	NA	NA

4248	ESP_OSR_03_A_APS_27-05-2019	348,61	72,47320058
4248	ESP_OSR_03_A_APS_27-05-2019	326,81	70,53524002
4248	ESP_OSR_03_A_APS_27-05-2019	290,43	70,69689274
4248	ESP_OSR_03_A_APS_27-05-2019	NA	NA
4248	ESP_OSR_03_A_APS_27-05-2019	NA	NA
4249	ESP_OSR_04_A_APS_27-05-2019	201,29	96,99859989
4249	ESP_OSR_04_A_APS_27-05-2019	220,86	71,4549832
4249	ESP_OSR_04_A_APS_27-05-2019	253,81	94,00911632
4249	ESP_OSR_04_A_APS_27-05-2019	NA	NA
4249	ESP_OSR_04_A_APS_27-05-2019	NA	NA
4250	ESP_OSR_05_A_APS_27-05-2019	224,27	80,08261703
4250	ESP_OSR_05_A_APS_27-05-2019	239,99	68,32539684
4250	ESP_OSR_05_A_APS_27-05-2019	251,93	77,82910084
4250	ESP_OSR_05_A_APS_27-05-2019	NA	NA
4250	ESP_OSR_05_A_APS_27-05-2019	NA	NA
4251	ESP_OSR_06_A_APS_23-05-2019	265,90	80,75879414
4251	ESP_OSR_06_A_APS_23-05-2019	252,01	72,66101075
4251	ESP_OSR_06_A_APS_23-05-2019	221,26	91,53059444
4251	ESP_OSR_06_A_APS_23-05-2019	NA	NA
4251	ESP_OSR_06_A_APS_23-05-2019	NA	NA
4252	ESP_OSR_07_A_APS_23-05-2019	266,06	107,044532
4252	ESP_OSR_07_A_APS_23-05-2019	172,19	100,6469012
4252	ESP_OSR_07_A_APS_23-05-2019	212,27	88,84205408
4252	ESP_OSR_07_A_APS_23-05-2019	NA	NA
4252	ESP_OSR_07_A_APS_23-05-2019	NA	NA
4253	ESP_OSR_08_A_APS_23-05-2019	265,13	86,70543126
4253	ESP_OSR_08_A_APS_23-05-2019	284,10	87,45202511
4253	ESP_OSR_08_A_APS_23-05-2019	263,14	73,99575427
4253	ESP_OSR_08_A_APS_23-05-2019	NA	NA
4253	ESP_OSR_08_A_APS_23-05-2019	NA	NA
4254	ESP_OSR_01_B_BPS_20-05-2019	345,13	97,57137742
4254	ESP_OSR_01_B_BPS_20-05-2019	306,10	93,08097557
4254	ESP_OSR_01_B_BPS_20-05-2019	263,92	96,66862019
4254	ESP_OSR_01_B_BPS_20-05-2019	NA	NA
4254	ESP_OSR_01_B_BPS_20-05-2019	NA	NA
4255	ESP_OSR_02_B_BPS_24-05-2019	385,93	50,16999287
4255	ESP_OSR_02_B_BPS_24-05-2019	379,31	73,4960893
4255	ESP_OSR_02_B_BPS_24-05-2019	374,06	66,7130802
4255	ESP_OSR_02_B_BPS_24-05-2019	NA	NA
4255	ESP_OSR_02_B_BPS_24-05-2019	NA	NA
4256	ESP_OSR_03_B_BPS_24-05-2019	319,83	57,00047606
4256	ESP_OSR_03_B_BPS_24-05-2019	329,86	64,1460473
4256	ESP_OSR_03_B_BPS_24-05-2019	364,78	74,43458264
4256	ESP_OSR_03_B_BPS_24-05-2019	NA	NA
4256	ESP_OSR_03_B_BPS_24-05-2019	NA	NA
4257	ESP_OSR_04_B_BPS_24-05-2019	393,21	55,95316858
4257	ESP_OSR_04_B_BPS_24-05-2019	386,18	97,66248318
4257	ESP_OSR_04_B_BPS_24-05-2019	374,81	104,5084482
4257	ESP_OSR_04_B_BPS_24-05-2019	NA	NA
4257	ESP_OSR_04_B_BPS_24-05-2019	NA	NA
4258	ESP_OSR_05_B_BPS_24-05-2019	340,38	70,26723275
4258	ESP_OSR_05_B_BPS_24-05-2019	326,99	66,20966673
4258	ESP_OSR_05_B_BPS_24-05-2019	301,20	96,83965359
4258	ESP_OSR_05_B_BPS_24-05-2019	NA	NA
4258	ESP_OSR_05_B_BPS_24-05-2019	NA	NA

4259	ESP_OSR_06_B_BPS_20-05-2019	139,27	101,2163749
4259	ESP_OSR_06_B_BPS_20-05-2019	222,36	139,4925169
4259	ESP_OSR_06_B_BPS_20-05-2019	137,06	120,6671428
4259	ESP_OSR_06_B_BPS_20-05-2019	NA	NA
4259	ESP_OSR_06_B_BPS_20-05-2019	NA	NA
4260	ESP_OSR_07_B_BPS_20-05-2019	210,63	43,9540549
4260	ESP_OSR_07_B_BPS_20-05-2019	254,12	48,20313031
4260	ESP_OSR_07_B_BPS_20-05-2019	255,18	56,7592132
4260	ESP_OSR_07_B_BPS_20-05-2019	NA	NA
4260	ESP_OSR_07_B_BPS_20-05-2019	NA	NA
4261	ESP_OSR_08_B_BPS_20-05-2019	300,44	47,08031868
4261	ESP_OSR_08_B_BPS_20-05-2019	274,28	52,54261193
4261	ESP_OSR_08_B_BPS_20-05-2019	197,88	55,65929858
4261	ESP_OSR_08_B_BPS_20-05-2019	NA	NA
4261	ESP_OSR_08_B_BPS_20-05-2019	NA	NA
4262	ESP_OSR_01_OPS_23-05-2019	269,59	67,86292097
4262	ESP_OSR_01_OPS_23-05-2019	294,00	53,08100669
4262	ESP_OSR_01_OPS_23-05-2019	286,37	57,78696547
4262	ESP_OSR_01_OPS_23-05-2019	NA	NA
4262	ESP_OSR_01_OPS_23-05-2019	NA	NA
4263	ESP_OSR_02_OPS_27-05-2019	345,97	63,43088202
4263	ESP_OSR_02_OPS_27-05-2019	407,89	53,54245026
4263	ESP_OSR_02_OPS_27-05-2019	406,68	53,74385251
4263	ESP_OSR_02_OPS_27-05-2019	NA	NA
4263	ESP_OSR_02_OPS_27-05-2019	NA	NA
4264	ESP_OSR_03_OPS_27-05-2019	446,99	47,34715838
4264	ESP_OSR_03_OPS_27-05-2019	413,64	48,97182918
4264	ESP_OSR_03_OPS_27-05-2019	465,19	52,16610275
4264	ESP_OSR_03_OPS_27-05-2019	NA	NA
4264	ESP_OSR_03_OPS_27-05-2019	NA	NA
4265	ESP_OSR_04_OPS_27-05-2019	439,32	76,87545342
4265	ESP_OSR_04_OPS_27-05-2019	468,39	79,36038625
4265	ESP_OSR_04_OPS_27-05-2019	453,30	80,54027197
4265	ESP_OSR_04_OPS_27-05-2019	NA	NA
4265	ESP_OSR_04_OPS_27-05-2019	NA	NA
4266	ESP_OSR_05_OPS_27-05-2019	524,54	56,50259148
4266	ESP_OSR_05_OPS_27-05-2019	523,25	60,07943904
4266	ESP_OSR_05_OPS_27-05-2019	456,02	77,12079521
4266	ESP_OSR_05_OPS_27-05-2019	NA	NA
4266	ESP_OSR_05_OPS_27-05-2019	NA	NA
4267	ESP_OSR_06_OPS_23-05-2019	443,17	71,00849503
4267	ESP_OSR_06_OPS_23-05-2019	457,04	70,61677623
4267	ESP_OSR_06_OPS_23-05-2019	486,62	60,22808811
4267	ESP_OSR_06_OPS_23-05-2019	NA	NA
4267	ESP_OSR_06_OPS_23-05-2019	NA	NA
4268	ESP_OSR_07_OPS_23-05-2019	434,78	47,89934985
4268	ESP_OSR_07_OPS_23-05-2019	466,09	65,93371276
4268	ESP_OSR_07_OPS_23-05-2019	429,66	39,67891103
4268	ESP_OSR_07_OPS_23-05-2019	NA	NA
4268	ESP_OSR_07_OPS_23-05-2019	NA	NA
4269	ESP_OSR_08_OPS_23-05-2019	362,19	56,39734003
4269	ESP_OSR_08_OPS_23-05-2019	305,49	56,37715223
4269	ESP_OSR_08_OPS_23-05-2019	500,66	51,7821701
4269	ESP_OSR_08_OPS_23-05-2019	NA	NA
4269	ESP_OSR_08_OPS_23-05-2019	NA	NA

4270	ESP_APP_09_A_APS_13-05-2019	271,11	74,96303213
4270	ESP_APP_09_A_APS_13-05-2019	253,91	62,66707177
4270	ESP_APP_09_A_APS_13-05-2019	214,48	57,29873371
4270	ESP_APP_09_A_APS_13-05-2019	NA	NA
4270	ESP_APP_09_A_APS_13-05-2019	NA	NA
4271	ESP_APP_10_A_APS_13-05-2019	299,25	72,13110551
4271	ESP_APP_10_A_APS_13-05-2019	272,88	62,1297284
4271	ESP_APP_10_A_APS_13-05-2019	312,97	86,91589675
4271	ESP_APP_10_A_APS_13-05-2019	NA	NA
4271	ESP_APP_10_A_APS_13-05-2019	NA	NA
4272	ESP_APP_11_A_APS_17-05-2019	322,25	67,50791304
4272	ESP_APP_11_A_APS_17-05-2019	323,50	69,14352306
4272	ESP_APP_11_A_APS_17-05-2019	325,19	53,6541643
4272	ESP_APP_11_A_APS_17-05-2019	NA	NA
4272	ESP_APP_11_A_APS_17-05-2019	NA	NA
4273	ESP_APP_12_A_APS_13-05-2019	229,09	59,41907278
4273	ESP_APP_12_A_APS_13-05-2019	203,00	68,9315802
4273	ESP_APP_12_A_APS_13-05-2019	213,61	58,462456
4273	ESP_APP_12_A_APS_13-05-2019	NA	NA
4273	ESP_APP_12_A_APS_13-05-2019	NA	NA
4274	ESP_APP_13_A_APS_17-05-2019	348,63	69,0177437
4274	ESP_APP_13_A_APS_17-05-2019	325,26	70,02023227
4274	ESP_APP_13_A_APS_17-05-2019	355,88	58,7688204
4274	ESP_APP_13_A_APS_17-05-2019	NA	NA
4274	ESP_APP_13_A_APS_17-05-2019	NA	NA
4275	ESP_APP_14_A_APS_13-05-2019	305,67	51,11077155
4275	ESP_APP_14_A_APS_13-05-2019	255,98	89,84713349
4275	ESP_APP_14_A_APS_13-05-2019	239,07	77,62582919
4275	ESP_APP_14_A_APS_13-05-2019	NA	NA
4275	ESP_APP_14_A_APS_13-05-2019	NA	NA
4276	ESP_APP_15_A_APS_17-05-2019	310,03	54,97283349
4276	ESP_APP_15_A_APS_17-05-2019	299,65	76,84728214
4276	ESP_APP_15_A_APS_17-05-2019	338,32	52,46123361
4276	ESP_APP_15_A_APS_17-05-2019	NA	NA
4276	ESP_APP_15_A_APS_17-05-2019	NA	NA
4277	ESP_APP_16_A_APS_17-05-2019	354,18	67,16583193
4277	ESP_APP_16_A_APS_17-05-2019	322,72	73,53159131
4277	ESP_APP_16_A_APS_17-05-2019	383,24	68,01059284
4277	ESP_APP_16_A_APS_17-05-2019	NA	NA
4277	ESP_APP_16_A_APS_17-05-2019	NA	NA
4278	ESP_APP_09_B_BPS_10-05-2019	382,37	64,87605015
4278	ESP_APP_09_B_BPS_10-05-2019	252,90	74,93431168
4278	ESP_APP_09_B_BPS_10-05-2019	345,05	68,86411313
4278	ESP_APP_09_B_BPS_10-05-2019	NA	NA
4278	ESP_APP_09_B_BPS_10-05-2019	NA	NA
4279	ESP_APP_10_B_BPS_10-05-2019	284,16	77,21567798
4279	ESP_APP_10_B_BPS_10-05-2019	251,09	87,11436266
4279	ESP_APP_10_B_BPS_10-05-2019	227,51	75,40142064
4279	ESP_APP_10_B_BPS_10-05-2019	NA	NA
4279	ESP_APP_10_B_BPS_10-05-2019	NA	NA
4280	ESP_APP_13_B_BPS_14-05-2019	276,08	49,29417937
4280	ESP_APP_13_B_BPS_14-05-2019	240,59	43,15983253
4280	ESP_APP_13_B_BPS_14-05-2019	223,03	54,55059475
4280	ESP_APP_13_B_BPS_14-05-2019	NA	NA
4280	ESP_APP_13_B_BPS_14-05-2019	NA	NA

4281	ESP_APP_14_B_BPS_10-05-2019	230,40	43,98465592
4281	ESP_APP_14_B_BPS_10-05-2019	293,54	48,56693593
4281	ESP_APP_14_B_BPS_10-05-2019	179,25	44,94512827
4281	ESP_APP_14_B_BPS_10-05-2019	NA	NA
4281	ESP_APP_14_B_BPS_10-05-2019	NA	NA
4282	ESP_APP_15_B_BPS_14-05-2019	258,21	77,05806012
4282	ESP_APP_15_B_BPS_14-05-2019	322,20	72,81465578
4282	ESP_APP_15_B_BPS_14-05-2019	281,33	82,99536021
4282	ESP_APP_15_B_BPS_14-05-2019	NA	NA
4282	ESP_APP_15_B_BPS_14-05-2019	NA	NA
4283	ESP_APP_16_B_BPS_14-05-2019	142,49	61,63583315
4283	ESP_APP_16_B_BPS_14-05-2019	167,11	57,41620777
4283	ESP_APP_16_B_BPS_14-05-2019	153,59	84,76069689
4283	ESP_APP_16_B_BPS_14-05-2019	NA	NA
4283	ESP_APP_16_B_BPS_14-05-2019	NA	NA
4284	ESP_APP_09_OPS_13-05-2019	187,33	39,32592791
4284	ESP_APP_09_OPS_13-05-2019	268,62	55,00362526
4284	ESP_APP_09_OPS_13-05-2019	222,20	61,34122027
4284	ESP_APP_09_OPS_13-05-2019	NA	NA
4284	ESP_APP_09_OPS_13-05-2019	NA	NA
4285	ESP_APP_10_OPS_13-05-2019	477,02	70,01456531
4285	ESP_APP_10_OPS_13-05-2019	459,56	69,56440221
4285	ESP_APP_10_OPS_13-05-2019	428,50	101,9440902
4285	ESP_APP_10_OPS_13-05-2019	NA	NA
4285	ESP_APP_10_OPS_13-05-2019	NA	NA
4286	ESP_APP_11_OPS_17-05-2019	268,43	53,89422546
4286	ESP_APP_11_OPS_17-05-2019	329,66	55,42593269
4286	ESP_APP_11_OPS_17-05-2019	297,21	52,41666342
4286	ESP_APP_11_OPS_17-05-2019	NA	NA
4286	ESP_APP_11_OPS_17-05-2019	NA	NA
4287	ESP_APP_12_OPS_13-05-2019	389,71	51,78921583
4287	ESP_APP_12_OPS_13-05-2019	379,33	50,68920162
4287	ESP_APP_12_OPS_13-05-2019	357,63	67,43447066
4287	ESP_APP_12_OPS_13-05-2019	NA	NA
4287	ESP_APP_12_OPS_13-05-2019	NA	NA
4288	ESP_APP_13_OPS_17-05-2019	442,80	56,8523961
4288	ESP_APP_13_OPS_17-05-2019	441,39	61,97296402
4288	ESP_APP_13_OPS_17-05-2019	434,80	45,02968319
4288	ESP_APP_13_OPS_17-05-2019	NA	NA
4288	ESP_APP_13_OPS_17-05-2019	NA	NA
4289	ESP_APP_14_OPS_13-05-2019	264,54	133,7854594
4289	ESP_APP_14_OPS_13-05-2019	253,63	134,9538433
4289	ESP_APP_14_OPS_13-05-2019	252,61	132,770747
4289	ESP_APP_14_OPS_13-05-2019	NA	NA
4289	ESP_APP_14_OPS_13-05-2019	NA	NA
4290	ESP_APP_15_OPS_17-05-2019	301,75	150,1610544
4290	ESP_APP_15_OPS_17-05-2019	299,10	114,9855191
4290	ESP_APP_15_OPS_17-05-2019	358,30	134,0466828
4290	ESP_APP_15_OPS_17-05-2019	NA	NA
4290	ESP_APP_15_OPS_17-05-2019	NA	NA
4291	ESP_APP_16_OPS_17-05-2019	456,88	60,21250455
4291	ESP_APP_16_OPS_17-05-2019	494,32	49,79319944
4291	ESP_APP_16_OPS_17-05-2019	562,95	57,6712727
4291	ESP_APP_16_OPS_17-05-2019	NA	NA
4291	ESP_APP_16_OPS_17-05-2019	NA	NA

4292	ESP_APP_10_B1 CEHEGIN	NA	NA
4292	ESP_APP_10_B1 CEHEGIN	NA	NA
4292	ESP_APP_10_B1 CEHEGIN	NA	NA
4292	ESP_APP_10_B1 CEHEGIN	NA	NA
4292	ESP_APP_10_B1 CEHEGIN	NA	NA
4293	CHE_OSR_01_A_PS 21.5.19	275,61	31,08517655
4293	CHE_OSR_01_A_PS 21.5.19	274,76	51,77566733
4293	CHE_OSR_01_A_PS 21.5.19	303,13	68,05133807
4293	CHE_OSR_01_A_PS 21.5.19	NA	NA
4293	CHE_OSR_01_A_PS 21.5.19	NA	NA
4294	CHE_OSR_02_A_PS 22.5.19	325,23	34,66973492
4294	CHE_OSR_02_A_PS 22.5.19	281,44	50,4936553
4294	CHE_OSR_02_A_PS 22.5.19	344,97	37,00196106
4294	CHE_OSR_02_A_PS 22.5.19	NA	NA
4294	CHE_OSR_02_A_PS 22.5.19	NA	NA
4295	CHE_OSR_03_A_PS 22.5.19	180,38	44,91661015
4295	CHE_OSR_03_A_PS 22.5.19	162,10	43,07397554
4295	CHE_OSR_03_A_PS 22.5.19	196,84	41,05074408
4295	CHE_OSR_03_A_PS 22.5.19	NA	NA
4295	CHE_OSR_03_A_PS 22.5.19	NA	NA
4296	CHE_OSR_04_A_PS 21.5.19	268,91	28,44718744
4296	CHE_OSR_04_A_PS 21.5.19	256,76	36,49474574
4296	CHE_OSR_04_A_PS 21.5.19	304,89	34,55291629
4296	CHE_OSR_04_A_PS 21.5.19	NA	NA
4296	CHE_OSR_04_A_PS 21.5.19	NA	NA
4297	CHE_OSR_05_A_PS 23.5.19	259,88	22,46765988
4297	CHE_OSR_05_A_PS 23.5.19	333,19	31,02520657
4297	CHE_OSR_05_A_PS 23.5.19	319,15	22,57027187
4297	CHE_OSR_05_A_PS 23.5.19	NA	NA
4297	CHE_OSR_05_A_PS 23.5.19	NA	NA
4298	CHE_OSR_06_A_PS 23.5.19	301,90	46,57990011
4298	CHE_OSR_06_A_PS 23.5.19	334,12	56,93432287
4298	CHE_OSR_06_A_PS 23.5.19	313,40	48,27589693
4298	CHE_OSR_06_A_PS 23.5.19	NA	NA
4298	CHE_OSR_06_A_PS 23.5.19	NA	NA
4299	CHE_OSR_07_A_PS 24.5.19	220,05	51,78874703
4299	CHE_OSR_07_A_PS 24.5.19	240,63	35,96398934
4299	CHE_OSR_07_A_PS 24.5.19	220,95	37,53824185
4299	CHE_OSR_07_A_PS 24.5.19	NA	NA
4299	CHE_OSR_07_A_PS 24.5.19	NA	NA
4300	CHE_OSR_08_A_PS 24.5.19	331,16	51,94107364
4300	CHE_OSR_08_A_PS 24.5.19	347,84	44,60682794
4300	CHE_OSR_08_A_PS 24.5.19	307,85	54,81231862
4300	CHE_OSR_08_A_PS 24.5.19	NA	NA
4300	CHE_OSR_08_A_PS 24.5.19	NA	NA
4301	CHE_APP_09_A_PS 9.5.19	302,26	85,89259233
4301	CHE_APP_09_A_PS 9.5.19	307,93	54,68912315
4301	CHE_APP_09_A_PS 9.5.19	339,44	55,77810095
4301	CHE_APP_09_A_PS 9.5.19	NA	NA
4301	CHE_APP_09_A_PS 9.5.19	NA	NA
4302	CHE_APP_10_A_PS 9.5.19	340,74	47,9082216
4302	CHE_APP_10_A_PS 9.5.19	260,84	49,44434139
4302	CHE_APP_10_A_PS 9.5.19	328,38	43,88058877
4302	CHE_APP_10_A_PS 9.5.19	NA	NA
4302	CHE_APP_10_A_PS 9.5.19	NA	NA

4303	CHE_APP_11_A_PS 10.5.19	270,88	50,38571373
4303	CHE_APP_11_A_PS 10.5.19	299,92	39,96374387
4303	CHE_APP_11_A_PS 10.5.19	289,77	47,27328043
4303	CHE_APP_11_A_PS 10.5.19	NA	NA
4303	CHE_APP_11_A_PS 10.5.19	NA	NA
4304	CHE_APP_12_A_PS 10.5.19	284,42	57,1396549
4304	CHE_APP_12_A_PS 10.5.19	326,86	40,47182296
4304	CHE_APP_12_A_PS 10.5.19	323,38	69,68839724
4304	CHE_APP_12_A_PS 10.5.19	NA	NA
4304	CHE_APP_12_A_PS 10.5.19	NA	NA
4305	CHE_APP_13_A_PS 14.05.19	330,41	55,64663228
4305	CHE_APP_13_A_PS 14.05.19	283,61	62,84362409
4305	CHE_APP_13_A_PS 14.05.19	233,46	56,7901543
4305	CHE_APP_13_A_PS 14.05.19	NA	NA
4305	CHE_APP_13_A_PS 14.05.19	NA	NA
4306	CHE_APP_14_A_PS 14.5.19	333,92	59,48730132
4306	CHE_APP_14_A_PS 14.5.19	325,36	44,91902645
4306	CHE_APP_14_A_PS 14.5.19	329,29	59,48141774
4306	CHE_APP_14_A_PS 14.5.19	NA	NA
4306	CHE_APP_14_A_PS 14.5.19	NA	NA
4307	CHE_APP_15_A_PS 13.5.19	310,82	50,40452126
4307	CHE_APP_15_A_PS 13.5.19	313,66	52,45148538
4307	CHE_APP_15_A_PS 13.5.19	298,56	42,38282835
4307	CHE_APP_15_A_PS 13.5.19	NA	NA
4307	CHE_APP_15_A_PS 13.5.19	NA	NA
4308	CHE_APP_16_A_PS 13.05.2019	285,57	87,05684725
4308	CHE_APP_16_A_PS 13.05.2019	305,89	80,26896387
4308	CHE_APP_16_A_PS 13.05.2019	301,87	59,92714246
4308	CHE_APP_16_A_PS 13.05.2019	NA	NA
4308	CHE_APP_16_A_PS 13.05.2019	NA	NA
4309	CHE_OSR_01_B_PS 21.5.19 OSR_01_B1	343,77	61,55908158
4309	CHE_OSR_01_B_PS 21.5.19 OSR_01_B1	342,83	60,6256053
4309	CHE_OSR_01_B_PS 21.5.19 OSR_01_B1	371,52	43,5835967
4309	CHE_OSR_01_B_PS 21.5.19 OSR_01_B1	NA	NA
4309	CHE_OSR_01_B_PS 21.5.19 OSR_01_B1	NA	NA
4310	CHE_OSR_02_B_PS 23.5.19	317,33	32,09360699
4310	CHE_OSR_02_B_PS 23.5.19	376,57	83,15618392
4310	CHE_OSR_02_B_PS 23.5.19	373,87	66,46279253
4310	CHE_OSR_02_B_PS 23.5.19	NA	NA
4310	CHE_OSR_02_B_PS 23.5.19	NA	NA
4311	CHE_OSR_03_B_PS 25.5.19	314,11	37,16645921
4311	CHE_OSR_03_B_PS 25.5.19	245,38	38,40278744
4311	CHE_OSR_03_B_PS 25.5.19	275,66	54,80892126
4311	CHE_OSR_03_B_PS 25.5.19	NA	NA
4311	CHE_OSR_03_B_PS 25.5.19	NA	NA
4312	CHE_OSR_04_B_PS 21.5.19	354,93	96,11739239
4312	CHE_OSR_04_B_PS 21.5.19	291,02	95,47268484
4312	CHE_OSR_04_B_PS 21.5.19	377,17	56,22927668
4312	CHE_OSR_04_B_PS 21.5.19	NA	NA
4312	CHE_OSR_04_B_PS 21.5.19	NA	NA
4313	CHE_OSR_05_B_PS 24.5.19	423,03	60,14076196
4313	CHE_OSR_05_B_PS 24.5.19	464,32	90,97075066
4313	CHE_OSR_05_B_PS 24.5.19	387,78	46,98597709
4313	CHE_OSR_05_B_PS 24.5.19	NA	NA
4313	CHE_OSR_05_B_PS 24.5.19	NA	NA

4314	CHE_OSR_06_B_PS 24.5.19	382,25	54,33107404
4314	CHE_OSR_06_B_PS 24.5.19	331,73	41,26634385
4314	CHE_OSR_06_B_PS 24.5.19	339,45	35,836285
4314	CHE_OSR_06_B_PS 24.5.19	NA	NA
4314	CHE_OSR_06_B_PS 24.5.19	NA	NA
4315	CHE_OSR_07_B_PS 25.5.19	369,57	52,60196062
4315	CHE_OSR_07_B_PS 25.5.19	411,30	47,87557779
4315	CHE_OSR_07_B_PS 25.5.19	404,86	55,10496499
4315	CHE_OSR_07_B_PS 25.5.19	NA	NA
4315	CHE_OSR_07_B_PS 25.5.19	NA	NA
4316	CHE_OSR_08_B_PS 25.5.19	341,65	69,91610758
4316	CHE_OSR_08_B_PS 25.5.19	292,33	59,60327596
4316	CHE_OSR_08_B_PS 25.5.19	292,10	53,08772279
4316	CHE_OSR_08_B_PS 25.5.19	NA	NA
4316	CHE_OSR_08_B_PS 25.5.19	NA	NA
4317	CHE_APP_09_B_PS 26.6.19	326,56	30,92257597
4317	CHE_APP_09_B_PS 26.6.19	385,01	35,63204835
4317	CHE_APP_09_B_PS 26.6.19	274,94	33,23618165
4317	CHE_APP_09_B_PS 26.6.19	NA	NA
4317	CHE_APP_09_B_PS 26.6.19	NA	NA
4318	CHE_APP_10_B_PS 9.5.19	330,44	54,34171337
4318	CHE_APP_10_B_PS 9.5.19	377,09	52,84974868
4318	CHE_APP_10_B_PS 9.5.19	370,31	52,74642339
4318	CHE_APP_10_B_PS 9.5.19	NA	NA
4318	CHE_APP_10_B_PS 9.5.19	NA	NA
4319	CHE_APP_11_B_PS 10.5.19	349,26	49,65618597
4319	CHE_APP_11_B_PS 10.5.19	325,59	42,12251083
4319	CHE_APP_11_B_PS 10.5.19	396,31	40,0887272
4319	CHE_APP_11_B_PS 10.5.19	NA	NA
4319	CHE_APP_11_B_PS 10.5.19	NA	NA
4320	CHE_APP_12_B_PS 10.5.19	188,59	38,89807083
4320	CHE_APP_12_B_PS 10.5.19	271,80	40,2992055
4320	CHE_APP_12_B_PS 10.5.19	141,95	35,17191784
4320	CHE_APP_12_B_PS 10.5.19	NA	NA
4320	CHE_APP_12_B_PS 10.5.19	NA	NA
4321	CHE_APP_13_B_PS 14.5.19	345,26	42,94609389
4321	CHE_APP_13_B_PS 14.5.19	399,76	50,44874781
4321	CHE_APP_13_B_PS 14.5.19	382,93	41,81935208
4321	CHE_APP_13_B_PS 14.5.19	NA	NA
4321	CHE_APP_13_B_PS 14.5.19	NA	NA
4322	CHE_APP_14_B_PS 14.5.19	415,26	33,35947316
4322	CHE_APP_14_B_PS 14.5.19	367,71	52,18398402
4322	CHE_APP_14_B_PS 14.5.19	364,58	33,49364426
4322	CHE_APP_14_B_PS 14.5.19	NA	NA
4322	CHE_APP_14_B_PS 14.5.19	NA	NA
4323	CHE_APP_15_B_PS 15.5.19	304,78	20,31594528
4323	CHE_APP_15_B_PS 15.5.19	317,48	22,20318519
4323	CHE_APP_15_B_PS 15.5.19	343,60	23,92454644
4323	CHE_APP_15_B_PS 15.5.19	NA	NA
4323	CHE_APP_15_B_PS 15.5.19	NA	NA
4324	CHE_APP_16_B_PS 15.5.19	298,69	38,16650819
4324	CHE_APP_16_B_PS 15.5.19	285,37	37,76689919
4324	CHE_APP_16_B_PS 15.5.19	276,34	49,35921828
4324	CHE_APP_16_B_PS 15.5.19	NA	NA
4324	CHE_APP_16_B_PS 15.5.19	NA	NA

4325	CHE_OSR_01_O_PS 21.05.19	178,26	34,34356591
4325	CHE_OSR_01_O_PS 21.05.19	232,63	36,88412858
4325	CHE_OSR_01_O_PS 21.05.19	201,45	66,53905774
4325	CHE_OSR_01_O_PS 21.05.19	NA	NA
4325	CHE_OSR_01_O_PS 21.05.19	NA	NA
4326	CHE_OSR_02_O_PS 23.05.19	213,08	68,51838237
4326	CHE_OSR_02_O_PS 23.05.19	223,14	48,543625
4326	CHE_OSR_02_O_PS 23.05.19	191,86	71,41929105
4326	CHE_OSR_02_O_PS 23.05.19	NA	NA
4326	CHE_OSR_02_O_PS 23.05.19	NA	NA
4327	CHE_OSR_03_O_PS 25.05.2019	201,93	80,46169198
4327	CHE_OSR_03_O_PS 25.05.2019	210,92	113,3264097
4327	CHE_OSR_03_O_PS 25.05.2019	189,80	120,6287534
4327	CHE_OSR_03_O_PS 25.05.2019	NA	NA
4327	CHE_OSR_03_O_PS 25.05.2019	NA	NA
4328	CHE_OSR_04_O_PS 21.05.2019	142,83	133,5175023
4328	CHE_OSR_04_O_PS 21.05.2019	172,69	110,1172826
4328	CHE_OSR_04_O_PS 21.05.2019	151,54	113,752163
4328	CHE_OSR_04_O_PS 21.05.2019	NA	NA
4328	CHE_OSR_04_O_PS 21.05.2019	NA	NA
4329	CHE_OSR_05_O_PS 23.05.19	232,81	46,14318911
4329	CHE_OSR_05_O_PS 23.05.19	230,50	62,51427162
4329	CHE_OSR_05_O_PS 23.05.19	214,57	56,7139461
4329	CHE_OSR_05_O_PS 23.05.19	NA	NA
4329	CHE_OSR_05_O_PS 23.05.19	NA	NA
4330	CHE_OSR_06_O_PS 23.05.2019	234,83	48,94368371
4330	CHE_OSR_06_O_PS 23.05.2019	241,68	34,88718606
4330	CHE_OSR_06_O_PS 23.05.2019	235,41	42,45870461
4330	CHE_OSR_06_O_PS 23.05.2019	NA	NA
4330	CHE_OSR_06_O_PS 23.05.2019	NA	NA
4331	CHE_OSR_07_O_PS 25.05.2019	252,17	77,86839745
4331	CHE_OSR_07_O_PS 25.05.2019	248,27	57,29086988
4331	CHE_OSR_07_O_PS 25.05.2019	257,80	51,45555802
4331	CHE_OSR_07_O_PS 25.05.2019	NA	NA
4331	CHE_OSR_07_O_PS 25.05.2019	NA	NA
4332	CHE_OSR_08_O_PS 25.05.2019	230,95	59,72399534
4332	CHE_OSR_08_O_PS 25.05.2019	224,05	71,64372085
4332	CHE_OSR_08_O_PS 25.05.2019	224,39	85,76884961
4332	CHE_OSR_08_O_PS 25.05.2019	NA	NA
4332	CHE_OSR_08_O_PS 25.05.2019	NA	NA
4333	CHE_APP_09_O_PS 9.5.19	206,03	55,0353229
4333	CHE_APP_09_O_PS 9.5.19	224,17	57,78009492
4333	CHE_APP_09_O_PS 9.5.19	223,76	62,32639969
4333	CHE_APP_09_O_PS 9.5.19	NA	NA
4333	CHE_APP_09_O_PS 9.5.19	NA	NA
4334	CHE_APP_13_O_PS 14.05.19	220,18	54,06261371
4334	CHE_APP_13_O_PS 14.05.19	245,58	61,53519704
4334	CHE_APP_13_O_PS 14.05.19	229,66	65,16993379
4334	CHE_APP_13_O_PS 14.05.19	NA	NA
4334	CHE_APP_13_O_PS 14.05.19	NA	NA
4335	CHE_APP_14_O_PS 14.05.2019	352,43	58,11407146
4335	CHE_APP_14_O_PS 14.05.2019	277,68	55,90821084
4335	CHE_APP_14_O_PS 14.05.2019	271,51	62,26369135
4335	CHE_APP_14_O_PS 14.05.2019	NA	NA
4335	CHE_APP_14_O_PS 14.05.2019	NA	NA

4336	CHE_APP_16_O_PS 15.05.2019	212,76	47,95485433
4336	CHE_APP_16_O_PS 15.05.2019	260,87	55,73112371
4336	CHE_APP_16_O_PS 15.05.2019	232,04	63,84740182
4336	CHE_APP_16_O_PS 15.05.2019	NA	NA
4336	CHE_APP_16_O_PS 15.05.2019	NA	NA
4337	ITA_OSR_01_APS	203,44	49,39302866
4337	ITA_OSR_01_APS	228,15	50,82168979
4337	ITA_OSR_01_APS	301,07	48,81282238
4337	ITA_OSR_01_APS	NA	NA
4337	ITA_OSR_01_APS	NA	NA
4338	ITA_OSR_02_APS	317,15	46,02806321
4338	ITA_OSR_02_APS	307,95	33,4963001
4338	ITA_OSR_02_APS	335,40	37,1111024
4338	ITA_OSR_02_APS	NA	NA
4338	ITA_OSR_02_APS	NA	NA
4339	ITA_OSR_03_APS	310,82	40,44748123
4339	ITA_OSR_03_APS	321,86	49,00291146
4339	ITA_OSR_03_APS	273,45	35,49002888
4339	ITA_OSR_03_APS	NA	NA
4339	ITA_OSR_03_APS	NA	NA
4340	ITA_OSR_04_APS	333,00	36,57679713
4340	ITA_OSR_04_APS	420,88	47,63947759
4340	ITA_OSR_04_APS	377,39	48,37544658
4340	ITA_OSR_04_APS	NA	NA
4340	ITA_OSR_04_APS	NA	NA
4341	ITA_OSR_05_APS	297,57	37,99857394
4341	ITA_OSR_05_APS	231,85	37,24732611
4341	ITA_OSR_05_APS	264,02	35,48625028
4341	ITA_OSR_05_APS	NA	NA
4341	ITA_OSR_05_APS	NA	NA
4342	ITA_OSR_06_APS	226,41	35,14060789
4342	ITA_OSR_06_APS	234,55	40,6731394
4342	ITA_OSR_06_APS	233,09	40,80137414
4342	ITA_OSR_06_APS	NA	NA
4342	ITA_OSR_06_APS	NA	NA
4343	ITA_OSR_07_APS	232,68	48,1673249
4343	ITA_OSR_07_APS	197,07	30,44577674
4343	ITA_OSR_07_APS	242,67	61,99689958
4343	ITA_OSR_07_APS	NA	NA
4343	ITA_OSR_07_APS	NA	NA
4344	ITA_OSR_08_APS	302,04	44,08519073
4344	ITA_OSR_08_APS	282,10	42,99184609
4344	ITA_OSR_08_APS	274,19	38,3137011
4344	ITA_OSR_08_APS	NA	NA
4344	ITA_OSR_08_APS	NA	NA
4345	ITA_APP_09_APS	270,63	39,7188455
4345	ITA_APP_09_APS	273,54	29,81711432
4345	ITA_APP_09_APS	296,72	50,65959359
4345	ITA_APP_09_APS	NA	NA
4345	ITA_APP_09_APS	NA	NA
4346	ITA_APP_10_APS	192,79	35,94337553
4346	ITA_APP_10_APS	282,84	47,53595883
4346	ITA_APP_10_APS	238,86	56,32809564
4346	ITA_APP_10_APS	NA	NA
4346	ITA_APP_10_APS	NA	NA

4347	ITA_APP_11_APS	272,78	53,49689419
4347	ITA_APP_11_APS	217,82	31,48626704
4347	ITA_APP_11_APS	269,25	44,97375693
4347	ITA_APP_11_APS	NA	NA
4347	ITA_APP_11_APS	NA	NA
4348	ITA_APP_12_APS	186,71	18,47484042
4348	ITA_APP_12_APS	182,29	19,18715666
4348	ITA_APP_12_APS	175,88	24,06530887
4348	ITA_APP_12_APS	NA	NA
4348	ITA_APP_12_APS	NA	NA
4349	ITA_APP_13_APS	280,11	15,56666515
4349	ITA_APP_13_APS	263,10	18,79343353
4349	ITA_APP_13_APS	278,70	27,27282313
4349	ITA_APP_13_APS	NA	NA
4349	ITA_APP_13_APS	NA	NA
4350	ITA_APP_14_APS	316,47	39,56252141
4350	ITA_APP_14_APS	339,93	59,34051528
4350	ITA_APP_14_APS	303,66	42,23181467
4350	ITA_APP_14_APS	NA	NA
4350	ITA_APP_14_APS	NA	NA
4351	ITA_APP_15_APS	284,84	40,5968835
4351	ITA_APP_15_APS	282,94	44,21037219
4351	ITA_APP_15_APS	229,27	46,12736025
4351	ITA_APP_15_APS	NA	NA
4351	ITA_APP_15_APS	NA	NA
4352	ITA_APP_16_APS	278,87	24,12606008
4352	ITA_APP_16_APS	268,77	34,3906882
4352	ITA_APP_16_APS	300,24	23,82229246
4352	ITA_APP_16_APS	NA	NA
4352	ITA_APP_16_APS	NA	NA
4353	ITA_OSR_01_BPS_16-05-2019	246,52	32,96921596
4353	ITA_OSR_01_BPS_16-05-2019	334,08	39,13865652
4353	ITA_OSR_01_BPS_16-05-2019	361,18	38,89910892
4353	ITA_OSR_01_BPS_16-05-2019	NA	NA
4353	ITA_OSR_01_BPS_16-05-2019	NA	NA
4354	ITA_OSR_03_BPS_16-05-2019	370,06	25,09434315
4354	ITA_OSR_03_BPS_16-05-2019	336,96	24,96408677
4354	ITA_OSR_03_BPS_16-05-2019	235,27	27,46052419
4354	ITA_OSR_03_BPS_16-05-2019	NA	NA
4354	ITA_OSR_03_BPS_16-05-2019	NA	NA
4355	ITA_OSR_04_BPS_16-05-2019	313,41	55,28390181
4355	ITA_OSR_04_BPS_16-05-2019	373,66	42,56529465
4355	ITA_OSR_04_BPS_16-05-2019	386,24	36,4442349
4355	ITA_OSR_04_BPS_16-05-2019	NA	NA
4355	ITA_OSR_04_BPS_16-05-2019	NA	NA
4356	ITA_OSR_05_BPS_16-05-2019	343,45	46,97260107
4356	ITA_OSR_05_BPS_16-05-2019	406,36	54,12173837
4356	ITA_OSR_05_BPS_16-05-2019	335,50	43,4567823
4356	ITA_OSR_05_BPS_16-05-2019	NA	NA
4356	ITA_OSR_05_BPS_16-05-2019	NA	NA
4357	ITA_OSR_06_BPS_16-05-2019	223,06	21,78069493
4357	ITA_OSR_06_BPS_16-05-2019	258,25	29,61210034
4357	ITA_OSR_06_BPS_16-05-2019	322,81	37,51986681
4357	ITA_OSR_06_BPS_16-05-2019	NA	NA
4357	ITA_OSR_06_BPS_16-05-2019	NA	NA

4358	ITA_OSR_07_BPS_16-05-2019	373,13	32,47078994
4358	ITA_OSR_07_BPS_16-05-2019	355,27	39,53252489
4358	ITA_OSR_07_BPS_16-05-2019	349,19	31,48106385
4358	ITA_OSR_07_BPS_16-05-2019	NA	NA
4358	ITA_OSR_07_BPS_16-05-2019	NA	NA
4359	ITA_OSR_08_BPS_16-05-2019	328,61	40,33057548
4359	ITA_OSR_08_BPS_16-05-2019	269,84	31,09608836
4359	ITA_OSR_08_BPS_16-05-2019	341,14	30,76338821
4359	ITA_OSR_08_BPS_16-05-2019	NA	NA
4359	ITA_OSR_08_BPS_16-05-2019	NA	NA
4360	ITA_APP_09_BPS_13-05-2019	303,15	27,88965456
4360	ITA_APP_09_BPS_13-05-2019	273,43	34,76820628
4360	ITA_APP_09_BPS_13-05-2019	316,32	36,17401523
4360	ITA_APP_09_BPS_13-05-2019	NA	NA
4360	ITA_APP_09_BPS_13-05-2019	NA	NA
4361	ITA_APP_10_BPS_13-05-2019	180,54	19,85778599
4361	ITA_APP_10_BPS_13-05-2019	277,56	24,28752147
4361	ITA_APP_10_BPS_13-05-2019	313,99	32,67768654
4361	ITA_APP_10_BPS_13-05-2019	NA	NA
4361	ITA_APP_10_BPS_13-05-2019	NA	NA
4362	ITA_APP_11_BPS_13-05-2019	375,46	34,18572704
4362	ITA_APP_11_BPS_13-05-2019	383,49	32,45752075
4362	ITA_APP_11_BPS_13-05-2019	291,55	33,41444213
4362	ITA_APP_11_BPS_13-05-2019	NA	NA
4362	ITA_APP_11_BPS_13-05-2019	NA	NA
4363	ITA_APP_12_BPS_13-05-2019	300,25	28,81639995
4363	ITA_APP_12_BPS_13-05-2019	322,72	28,60343385
4363	ITA_APP_12_BPS_13-05-2019	411,95	30,96107427
4363	ITA_APP_12_BPS_13-05-2019	NA	NA
4363	ITA_APP_12_BPS_13-05-2019	NA	NA
4364	ITA_APP_13_BPS_13-05-2019	298,45	25,9019526
4364	ITA_APP_13_BPS_13-05-2019	267,22	23,88428504
4364	ITA_APP_13_BPS_13-05-2019	216,19	35,28832161
4364	ITA_APP_13_BPS_13-05-2019	NA	NA
4364	ITA_APP_13_BPS_13-05-2019	NA	NA
4365	ITA_APP_14_BPS_13-05-2019	206,56	19,01564201
4365	ITA_APP_14_BPS_13-05-2019	261,12	27,20466267
4365	ITA_APP_14_BPS_13-05-2019	206,90	22,94385672
4365	ITA_APP_14_BPS_13-05-2019	NA	NA
4365	ITA_APP_14_BPS_13-05-2019	NA	NA
4366	ITA_APP_15_BPS_13-05-2019	379,49	38,61228522
4366	ITA_APP_15_BPS_13-05-2019	442,99	31,91037815
4366	ITA_APP_15_BPS_13-05-2019	419,12	31,1398478
4366	ITA_APP_15_BPS_13-05-2019	NA	NA
4366	ITA_APP_15_BPS_13-05-2019	NA	NA
4367	ITA_APP_16_BPS_13-05-2019	434,97	30,08236503
4367	ITA_APP_16_BPS_13-05-2019	409,50	29,83111191
4367	ITA_APP_16_BPS_13-05-2019	410,36	36,91652317
4367	ITA_APP_16_BPS_13-05-2019	NA	NA
4367	ITA_APP_16_BPS_13-05-2019	NA	NA
4368	ITA_OSR_01_OPS_13-05-2019	324,45	47,63840216
4368	ITA_OSR_01_OPS_13-05-2019	271,06	38,02525701
4368	ITA_OSR_01_OPS_13-05-2019	250,28	31,01735959
4368	ITA_OSR_01_OPS_13-05-2019	NA	NA
4368	ITA_OSR_01_OPS_13-05-2019	NA	NA

4369	ITA_OSR_02_OPS_13-05-2019	341,35	38,30359811
4369	ITA_OSR_02_OPS_13-05-2019	401,95	38,42539192
4369	ITA_OSR_02_OPS_13-05-2019	305,56	33,57943847
4369	ITA_OSR_02_OPS_13-05-2019	NA	NA
4369	ITA_OSR_02_OPS_13-05-2019	NA	NA
4370	ITA_OSR_03_OPS_13-05-2019	397,03	45,838159
4370	ITA_OSR_03_OPS_13-05-2019	251,05	40,7333196
4370	ITA_OSR_03_OPS_13-05-2019	436,92	62,10412816
4370	ITA_OSR_03_OPS_13-05-2019	NA	NA
4370	ITA_OSR_03_OPS_13-05-2019	NA	NA
4371	ITA_OSR_04_OPS_13-05-2019	149,92	48,28971311
4371	ITA_OSR_04_OPS_13-05-2019	158,47	56,05875459
4371	ITA_OSR_04_OPS_13-05-2019	152,88	43,61682427
4371	ITA_OSR_04_OPS_13-05-2019	NA	NA
4371	ITA_OSR_04_OPS_13-05-2019	NA	NA
4372	ITA_OSR_05_OPS_13-05-2019	303,90	31,56083468
4372	ITA_OSR_05_OPS_13-05-2019	321,83	37,13977167
4372	ITA_OSR_05_OPS_13-05-2019	272,26	24,74186787
4372	ITA_OSR_05_OPS_13-05-2019	NA	NA
4372	ITA_OSR_05_OPS_13-05-2019	NA	NA
4373	ITA_OSR_06_OPS_13-05-2019	186,39	82,76393277
4373	ITA_OSR_06_OPS_13-05-2019	146,53	79,18118102
4373	ITA_OSR_06_OPS_13-05-2019	207,67	65,60224159
4373	ITA_OSR_06_OPS_13-05-2019	NA	NA
4373	ITA_OSR_06_OPS_13-05-2019	NA	NA
4374	ITA_OSR_07_OPS_13-05-2019	189,15	42,31691233
4374	ITA_OSR_07_OPS_13-05-2019	221,18	35,68371459
4374	ITA_OSR_07_OPS_13-05-2019	235,89	32,78270784
4374	ITA_OSR_07_OPS_13-05-2019	NA	NA
4374	ITA_OSR_07_OPS_13-05-2019	NA	NA
4375	ITA_OSR_08_OPS_13-05-2019	319,09	48,07607552
4375	ITA_OSR_08_OPS_13-05-2019	365,84	48,18142145
4375	ITA_OSR_08_OPS_13-05-2019	326,80	57,50976464
4375	ITA_OSR_08_OPS_13-05-2019	NA	NA
4375	ITA_OSR_08_OPS_13-05-2019	NA	NA
4376	ITA_APP_09_OPS_13-05-2019	224,06	52,69658688
4376	ITA_APP_09_OPS_13-05-2019	145,35	45,52030018
4376	ITA_APP_09_OPS_13-05-2019	240,37	60,20022232
4376	ITA_APP_09_OPS_13-05-2019	NA	NA
4376	ITA_APP_09_OPS_13-05-2019	NA	NA
4377	ITA_APP_11_OPS_13-05-2019	162,92	95,52883479
4377	ITA_APP_11_OPS_13-05-2019	118,35	105,6798691
4377	ITA_APP_11_OPS_13-05-2019	235,07	126,0536166
4377	ITA_APP_11_OPS_13-05-2019	NA	NA
4377	ITA_APP_11_OPS_13-05-2019	NA	NA
4378	ITA_APP_12_OPS_13-05-2019	198,52	37,59932915
4378	ITA_APP_12_OPS_13-05-2019	295,35	45,22868733
4378	ITA_APP_12_OPS_13-05-2019	165,80	35,48403862
4378	ITA_APP_12_OPS_13-05-2019	NA	NA
4378	ITA_APP_12_OPS_13-05-2019	NA	NA
4379	ITA_APP_13_OPS_13-05-2019	236,22	33,65620809
4379	ITA_APP_13_OPS_13-05-2019	242,54	33,44371685
4379	ITA_APP_13_OPS_13-05-2019	275,21	31,40960155
4379	ITA_APP_13_OPS_13-05-2019	NA	NA
4379	ITA_APP_13_OPS_13-05-2019	NA	NA

4380	ITA_APP_15_OPS_13-05-2019	234,15	36,29356761
4380	ITA_APP_15_OPS_13-05-2019	228,55	38,40648601
4380	ITA_APP_15_OPS_13-05-2019	268,12	43,21065307
4380	ITA_APP_15_OPS_13-05-2019	NA	NA
4380	ITA_APP_15_OPS_13-05-2019	NA	NA
4381	ITA_APP_16_OPS_13-05-2019	281,92	38,05565756
4381	ITA_APP_16_OPS_13-05-2019	200,80	37,13977568
4381	ITA_APP_16_OPS_13-05-2019	296,31	29,79239636
4381	ITA_APP_16_OPS_13-05-2019	NA	NA
4381	ITA_APP_16_OPS_13-05-2019	NA	NA
4382	GER_OSR_01_A_APS_05-06-2019	277,52	47,8589775
4382	GER_OSR_01_A_APS_05-06-2019	225,53	53,05679404
4382	GER_OSR_01_A_APS_05-06-2019	258,98	56,39248864
4382	GER_OSR_01_A_APS_05-06-2019	NA	NA
4382	GER_OSR_01_A_APS_05-06-2019	NA	NA
4383	GER_OSR_02_A_APS_06-06-2019	306,61	25,14277165
4383	GER_OSR_02_A_APS_06-06-2019	373,51	29,96802126
4383	GER_OSR_02_A_APS_06-06-2019	346,84	27,01426375
4383	GER_OSR_02_A_APS_06-06-2019	NA	NA
4383	GER_OSR_02_A_APS_06-06-2019	NA	NA
4384	GER_OSR_03_A_APS_07-06-2019	329,57	33,13262681
4384	GER_OSR_03_A_APS_07-06-2019	390,58	41,59790396
4384	GER_OSR_03_A_APS_07-06-2019	328,50	52,65395606
4384	GER_OSR_03_A_APS_07-06-2019	NA	NA
4384	GER_OSR_03_A_APS_07-06-2019	NA	NA
4385	GER_OSR_04_A_APS_07-06-2019	352,54	29,05257374
4385	GER_OSR_04_A_APS_07-06-2019	375,73	37,54213665
4385	GER_OSR_04_A_APS_07-06-2019	356,09	42,61883042
4385	GER_OSR_04_A_APS_07-06-2019	NA	NA
4385	GER_OSR_04_A_APS_07-06-2019	NA	NA
4386	GER_OSR_05_A_APS_08-06-2019	431,67	69,28995536
4386	GER_OSR_05_A_APS_08-06-2019	473,59	69,88098334
4386	GER_OSR_05_A_APS_08-06-2019	367,84	69,68135835
4386	GER_OSR_05_A_APS_08-06-2019	NA	NA
4386	GER_OSR_05_A_APS_08-06-2019	NA	NA
4387	GER_OSR_06_A_APS_04-06-2019	378,90	52,54212951
4387	GER_OSR_06_A_APS_04-06-2019	317,94	43,6284231
4387	GER_OSR_06_A_APS_04-06-2019	301,61	53,98624955
4387	GER_OSR_06_A_APS_04-06-2019	NA	NA
4387	GER_OSR_06_A_APS_04-06-2019	NA	NA
4388	GER_OSR_07_A_APS_05-06-2019	205,96	44,20056262
4388	GER_OSR_07_A_APS_05-06-2019	257,48	52,45259769
4388	GER_OSR_07_A_APS_05-06-2019	269,21	57,59363063
4388	GER_OSR_07_A_APS_05-06-2019	NA	NA
4388	GER_OSR_07_A_APS_05-06-2019	NA	NA
4389	GER_OSR_08_A_APS_06-06-2019	353,85	58,65935345
4389	GER_OSR_08_A_APS_06-06-2019	360,55	57,3543671
4389	GER_OSR_08_A_APS_06-06-2019	322,29	56,1771975
4389	GER_OSR_08_A_APS_06-06-2019	NA	NA
4389	GER_OSR_08_A_APS_06-06-2019	NA	NA
4390	GER_OSR_01_B1_BPS_25-07-2019	342,87	26,80959528
4390	GER_OSR_01_B1_BPS_25-07-2019	415,07	13,31457775
4390	GER_OSR_01_B1_BPS_25-07-2019	421,62	14,77531516
4390	GER_OSR_01_B1_BPS_25-07-2019	NA	NA
4390	GER_OSR_01_B1_BPS_25-07-2019	NA	NA

4391	GER_OSR_02_B3_BPS_31-07-2019	385,09	31,54063277
4391	GER_OSR_02_B3_BPS_31-07-2019	442,91	29,27548882
4391	GER_OSR_02_B3_BPS_31-07-2019	405,81	27,4552123
4391	GER_OSR_02_B3_BPS_31-07-2019	NA	NA
4391	GER_OSR_02_B3_BPS_31-07-2019	NA	NA
4392	GER_OSR_03_B1_BPS_29-07-2019	471,16	19,94816882
4392	GER_OSR_03_B1_BPS_29-07-2019	400,15	27,72100196
4392	GER_OSR_03_B1_BPS_29-07-2019	439,03	27,30975912
4392	GER_OSR_03_B1_BPS_29-07-2019	NA	NA
4392	GER_OSR_03_B1_BPS_29-07-2019	NA	NA
4393	GER_OSR_04_B1_BPS_30-07-2019	336,90	28,29820411
4393	GER_OSR_04_B1_BPS_30-07-2019	308,24	29,62475474
4393	GER_OSR_04_B1_BPS_30-07-2019	291,21	38,43016509
4393	GER_OSR_04_B1_BPS_30-07-2019	NA	NA
4393	GER_OSR_04_B1_BPS_30-07-2019	NA	NA
4394	GER_OSR_05_B1_BPS_05-08-2019	277,05	19,86216914
4394	GER_OSR_05_B1_BPS_05-08-2019	367,04	18,52451592
4394	GER_OSR_05_B1_BPS_05-08-2019	365,45	26,66241792
4394	GER_OSR_05_B1_BPS_05-08-2019	NA	NA
4394	GER_OSR_05_B1_BPS_05-08-2019	NA	NA
4395	GER_OSR_06_B2_BPS_01-08-2019	142,08	21,54829946
4395	GER_OSR_06_B2_BPS_01-08-2019	123,53	23,07525172
4395	GER_OSR_06_B2_BPS_01-08-2019	149,07	19,98656939
4395	GER_OSR_06_B2_BPS_01-08-2019	NA	NA
4395	GER_OSR_06_B2_BPS_01-08-2019	NA	NA
4396	GER_OSR_07_B1_BPS_05-08-2019	439,45	24,18689465
4396	GER_OSR_07_B1_BPS_05-08-2019	377,86	18,59140633
4396	GER_OSR_07_B1_BPS_05-08-2019	327,46	18,0199153
4396	GER_OSR_07_B1_BPS_05-08-2019	NA	NA
4396	GER_OSR_07_B1_BPS_05-08-2019	NA	NA
4397	GER_OSR_08_B2_BPS_25-07-2019	341,77	24,31715612
4397	GER_OSR_08_B2_BPS_25-07-2019	306,13	17,62735461
4397	GER_OSR_08_B2_BPS_25-07-2019	291,36	21,78980595
4397	GER_OSR_08_B2_BPS_25-07-2019	NA	NA
4397	GER_OSR_08_B2_BPS_25-07-2019	NA	NA
4398	GER_OSR_01_O1_OPS_05-06-2019	473,13	44,54766258
4398	GER_OSR_01_O1_OPS_05-06-2019	494,37	42,35609549
4398	GER_OSR_01_O1_OPS_05-06-2019	489,21	37,97238546
4398	GER_OSR_01_O1_OPS_05-06-2019	NA	NA
4398	GER_OSR_01_O1_OPS_05-06-2019	NA	NA
4399	GER_OSR_02_O1_OPS_06-06-2019	408,13	55,84992663
4399	GER_OSR_02_O1_OPS_06-06-2019	409,17	50,73647876
4399	GER_OSR_02_O1_OPS_06-06-2019	415,61	47,02909987
4399	GER_OSR_02_O1_OPS_06-06-2019	NA	NA
4399	GER_OSR_02_O1_OPS_06-06-2019	NA	NA
4400	GER_OSR_03_O1_OPS_07-06-2019	455,47	58,06824217
4400	GER_OSR_03_O1_OPS_07-06-2019	508,98	73,65276255
4400	GER_OSR_03_O1_OPS_07-06-2019	459,92	57,83605043
4400	GER_OSR_03_O1_OPS_07-06-2019	NA	NA
4400	GER_OSR_03_O1_OPS_07-06-2019	NA	NA
4401	GER_OSR_05_O1_OPS_08-06-2019	393,88	57,70452932
4401	GER_OSR_05_O1_OPS_08-06-2019	384,77	59,56560703
4401	GER_OSR_05_O1_OPS_08-06-2019	399,58	54,38735916
4401	GER_OSR_05_O1_OPS_08-06-2019	NA	NA
4401	GER_OSR_05_O1_OPS_08-06-2019	NA	NA

4402	GER_OSR_06_O2_OPS_04-06-2019	428,96	56,82096079
4402	GER_OSR_06_O2_OPS_04-06-2019	453,82	56,43007718
4402	GER_OSR_06_O2_OPS_04-06-2019	445,63	52,77300333
4402	GER_OSR_06_O2_OPS_04-06-2019	NA	NA
4402	GER_OSR_06_O2_OPS_04-06-2019	NA	NA
4403	GER_OSR_07_O1(3?)_OPS_05-06-2019	388,77	67,97846843
4403	GER_OSR_07_O1(3?)_OPS_05-06-2019	346,62	61,16841946
4403	GER_OSR_07_O1(3?)_OPS_05-06-2019	316,22	43,79027551
4403	GER_OSR_07_O1(3?)_OPS_05-06-2019	NA	NA
4403	GER_OSR_07_O1(3?)_OPS_05-06-2019	NA	NA
4404	GER_OSR_08_O1_OPS_08-06-2019	367,39	52,12075128
4404	GER_OSR_08_O1_OPS_08-06-2019	366,21	55,26170009
4404	GER_OSR_08_O1_OPS_08-06-2019	381,98	64,38256744
4404	GER_OSR_08_O1_OPS_08-06-2019	NA	NA
4404	GER_OSR_08_O1_OPS_08-06-2019	NA	NA
4405	IRE_OSR_01_APS_23-05-2019	228,88	75,62093846
4405	IRE_OSR_01_APS_23-05-2019	221,12	80,39738486
4405	IRE_OSR_01_APS_23-05-2019	257,36	86,28501496
4405	IRE_OSR_01_APS_23-05-2019	NA	NA
4405	IRE_OSR_01_APS_23-05-2019	NA	NA
4406	IRE_OSR_02_APS_25-05-2019	283,01	81,71675123
4406	IRE_OSR_02_APS_25-05-2019	318,37	86,3564077
4406	IRE_OSR_02_APS_25-05-2019	255,57	67,54128847
4406	IRE_OSR_02_APS_25-05-2019	NA	NA
4406	IRE_OSR_02_APS_25-05-2019	NA	NA
4407	IRE_OSR_03_APS_24-05-2019	245,78	63,20298539
4407	IRE_OSR_03_APS_24-05-2019	219,53	64,59699214
4407	IRE_OSR_03_APS_24-05-2019	237,97	60,78214408
4407	IRE_OSR_03_APS_24-05-2019	NA	NA
4407	IRE_OSR_03_APS_24-05-2019	NA	NA
4408	IRE_OSR_04_APS_24-05-2019	293,93	50,64392861
4408	IRE_OSR_04_APS_24-05-2019	308,87	44,7537438
4408	IRE_OSR_04_APS_24-05-2019	343,55	42,16274112
4408	IRE_OSR_04_APS_24-05-2019	NA	NA
4408	IRE_OSR_04_APS_24-05-2019	NA	NA
4409	IRE_OSR_05_APS_26-05-2019	307,98	54,58348873
4409	IRE_OSR_05_APS_26-05-2019	300,20	64,09259944
4409	IRE_OSR_05_APS_26-05-2019	293,39	51,4978354
4409	IRE_OSR_05_APS_26-05-2019	NA	NA
4409	IRE_OSR_05_APS_26-05-2019	NA	NA
4410	IRE_OSR_06_APS_03-06-2019	238,05	75,06918352
4410	IRE_OSR_06_APS_03-06-2019	291,30	78,49221312
4410	IRE_OSR_06_APS_03-06-2019	229,41	58,91483136
4410	IRE_OSR_06_APS_03-06-2019	NA	NA
4410	IRE_OSR_06_APS_03-06-2019	NA	NA
4411	IRE_OSR_07_APS_26-05-2019	198,00	65,84603572
4411	IRE_OSR_07_APS_26-05-2019	299,04	47,51072722
4411	IRE_OSR_07_APS_26-05-2019	260,95	52,92656188
4411	IRE_OSR_07_APS_26-05-2019	NA	NA
4411	IRE_OSR_07_APS_26-05-2019	NA	NA
4412	IRE_OSR_08_APS_23-05-2019	294,95	84,40737666
4412	IRE_OSR_08_APS_23-05-2019	321,22	42,37330053
4412	IRE_OSR_08_APS_23-05-2019	300,16	57,13017976
4412	IRE_OSR_08_APS_23-05-2019	NA	NA
4412	IRE_OSR_08_APS_23-05-2019	NA	NA

4413	IRE_APP_09_APS_28-05-2019	278,39	84,06737997
4413	IRE_APP_09_APS_28-05-2019	319,58	68,50240591
4413	IRE_APP_09_APS_28-05-2019	291,30	71,7756333
4413	IRE_APP_09_APS_28-05-2019	NA	NA
4413	IRE_APP_09_APS_28-05-2019	NA	NA
4414	IRE_APP_10_APS_28-05-2019	273,19	85,88876991
4414	IRE_APP_10_APS_28-05-2019	375,80	64,61722139
4414	IRE_APP_10_APS_28-05-2019	386,80	91,94419278
4414	IRE_APP_10_APS_28-05-2019	NA	NA
4414	IRE_APP_10_APS_28-05-2019	NA	NA
4415	IRE_APP_11_APS_29-05-2019	291,30	63,01014293
4415	IRE_APP_11_APS_29-05-2019	309,22	37,66947763
4415	IRE_APP_11_APS_29-05-2019	270,35	38,17912203
4415	IRE_APP_11_APS_29-05-2019	NA	NA
4415	IRE_APP_11_APS_29-05-2019	NA	NA
4416	IRE_APP_12_APS_29-05-2019	365,74	64,20508045
4416	IRE_APP_12_APS_29-05-2019	409,79	64,19243333
4416	IRE_APP_12_APS_29-05-2019	349,36	65,80559444
4416	IRE_APP_12_APS_29-05-2019	NA	NA
4416	IRE_APP_12_APS_29-05-2019	NA	NA
4417	IRE_APP_13_APS_03-06-2019	339,73	88,17716982
4417	IRE_APP_13_APS_03-06-2019	386,95	70,7111956
4417	IRE_APP_13_APS_03-06-2019	212,25	79,2870611
4417	IRE_APP_13_APS_03-06-2019	NA	NA
4417	IRE_APP_13_APS_03-06-2019	NA	NA
4418	IRE_APP_14_APS_27-05-2019	342,08	58,89572071
4418	IRE_APP_14_APS_27-05-2019	265,88	55,71488986
4418	IRE_APP_14_APS_27-05-2019	307,85	48,1556123
4418	IRE_APP_14_APS_27-05-2019	NA	NA
4418	IRE_APP_14_APS_27-05-2019	NA	NA
4419	IRE_APP_15_APS_26-05-2019	388,84	41,83656007
4419	IRE_APP_15_APS_26-05-2019	375,26	68,83715804
4419	IRE_APP_15_APS_26-05-2019	374,12	35,90276077
4419	IRE_APP_15_APS_26-05-2019	NA	NA
4419	IRE_APP_15_APS_26-05-2019	NA	NA
4420	IRE_APP_16_APS_26-05-2019	313,09	93,20467442
4420	IRE_APP_16_APS_26-05-2019	263,19	79,73418534
4420	IRE_APP_16_APS_26-05-2019	267,85	89,85142215
4420	IRE_APP_16_APS_26-05-2019	NA	NA
4420	IRE_APP_16_APS_26-05-2019	NA	NA
4421	IRE_OSR_02_BPS_13-05-2019	436,03	40,36878279
4421	IRE_OSR_02_BPS_13-05-2019	328,64	34,67394343
4421	IRE_OSR_02_BPS_13-05-2019	447,95	32,38505797
4421	IRE_OSR_02_BPS_13-05-2019	NA	NA
4421	IRE_OSR_02_BPS_13-05-2019	NA	NA
4422	IRE_OSR_03_BPS_18-05-2019	355,20	NA
4422	IRE_OSR_03_BPS_18-05-2019	274,09	NA
4422	IRE_OSR_03_BPS_18-05-2019	267,92	NA
4422	IRE_OSR_03_BPS_18-05-2019	NA	NA
4422	IRE_OSR_03_BPS_18-05-2019	NA	NA
4423	IRE_OSR_04_BPS_14-05-2019	272,63	45,77047139
4423	IRE_OSR_04_BPS_14-05-2019	219,58	36,69512225
4423	IRE_OSR_04_BPS_14-05-2019	328,17	45,00207839
4423	IRE_OSR_04_BPS_14-05-2019	NA	NA
4423	IRE_OSR_04_BPS_14-05-2019	NA	NA

4424	IRE_OSR_05_BPS_13-05-2019	299,72	42,10662222
4424	IRE_OSR_05_BPS_13-05-2019	282,14	38,10792596
4424	IRE_OSR_05_BPS_13-05-2019	299,15	42,26218711
4424	IRE_OSR_05_BPS_13-05-2019	NA	NA
4424	IRE_OSR_05_BPS_13-05-2019	NA	NA
4425	IRE_OSR_06_BPS_12-06-2019	287,69	34,84217596
4425	IRE_OSR_06_BPS_12-06-2019	254,00	34,33594438
4425	IRE_OSR_06_BPS_12-06-2019	219,41	39,74689604
4425	IRE_OSR_06_BPS_12-06-2019	NA	NA
4425	IRE_OSR_06_BPS_12-06-2019	NA	NA
4426	IRE_OSR_07_BPS_18-05-2019	232,81	61,17871665
4426	IRE_OSR_07_BPS_18-05-2019	200,03	79,58563716
4426	IRE_OSR_07_BPS_18-05-2019	356,95	59,47504412
4426	IRE_OSR_07_BPS_18-05-2019	NA	NA
4426	IRE_OSR_07_BPS_18-05-2019	NA	NA
4427	IRE_OSR_08_BPS_18-05-2019	376,13	37,82303637
4427	IRE_OSR_08_BPS_18-05-2019	386,89	41,58519196
4427	IRE_OSR_08_BPS_18-05-2019	408,23	40,41618542
4427	IRE_OSR_08_BPS_18-05-2019	NA	NA
4427	IRE_OSR_08_BPS_18-05-2019	NA	NA
4428	IRE_APP_09_BPS_07-06-2019	308,28	40,46611101
4428	IRE_APP_09_BPS_07-06-2019	328,59	30,18509182
4428	IRE_APP_09_BPS_07-06-2019	324,57	35,96271203
4428	IRE_APP_09_BPS_07-06-2019	NA	NA
4428	IRE_APP_09_BPS_07-06-2019	NA	NA
4429	IRE_APP_10_BPS_06-06-2019	412,99	32,36027986
4429	IRE_APP_10_BPS_06-06-2019	351,55	35,11246758
4429	IRE_APP_10_BPS_06-06-2019	395,56	47,30044268
4429	IRE_APP_10_BPS_06-06-2019	NA	NA
4429	IRE_APP_10_BPS_06-06-2019	NA	NA
4430	IRE_APP_12_BPS_06-06-2019	365,28	50,40832642
4430	IRE_APP_12_BPS_06-06-2019	358,52	37,844536
4430	IRE_APP_12_BPS_06-06-2019	352,52	34,24644416
4430	IRE_APP_12_BPS_06-06-2019	NA	NA
4430	IRE_APP_12_BPS_06-06-2019	NA	NA
4431	IRE_APP_14_BPS_05-06-2019	387,17	40,786009
4431	IRE_APP_14_BPS_05-06-2019	347,06	43,70866172
4431	IRE_APP_14_BPS_05-06-2019	376,48	38,28110158
4431	IRE_APP_14_BPS_05-06-2019	NA	NA
4431	IRE_APP_14_BPS_05-06-2019	NA	NA
4432	EST_OSR_01_APS-30-05-2019	227,74	30,33881711
4432	EST_OSR_01_APS-30-05-2019	286,06	52,66733247
4432	EST_OSR_01_APS-30-05-2019	268,38	38,37274828
4432	EST_OSR_01_APS-30-05-2019	NA	NA
4432	EST_OSR_01_APS-30-05-2019	NA	NA
4433	EST_OSR_02_APS_04-06-2019	302,35	41,6524191
4433	EST_OSR_02_APS_04-06-2019	377,19	51,89241288
4433	EST_OSR_02_APS_04-06-2019	321,45	35,91738572
4433	EST_OSR_02_APS_04-06-2019	NA	NA
4433	EST_OSR_02_APS_04-06-2019	NA	NA
4434	EST_OSR_03_APS_05-06-2019	232,78	35,65111934
4434	EST_OSR_03_APS_05-06-2019	240,34	31,43478013
4434	EST_OSR_03_APS_05-06-2019	219,41	45,14992866
4434	EST_OSR_03_APS_05-06-2019	NA	NA
4434	EST_OSR_03_APS_05-06-2019	NA	NA

4435	EST_OSR_05_APS_04-06-2019	287,19	50,97521286
4435	EST_OSR_05_APS_04-06-2019	321,30	50,78132452
4435	EST_OSR_05_APS_04-06-2019	285,11	36,87591592
4435	EST_OSR_05_APS_04-06-2019	NA	NA
4435	EST_OSR_05_APS_04-06-2019	NA	NA
4436	EST_OSR_06_APS_05-06-2019	248,58	45,62755873
4436	EST_OSR_06_APS_05-06-2019	251,04	45,03085048
4436	EST_OSR_06_APS_05-06-2019	280,70	50,03839118
4436	EST_OSR_06_APS_05-06-2019	NA	NA
4436	EST_OSR_06_APS_05-06-2019	NA	NA
4437	EST_OSR_08_APS_30-05-2019	252,39	30,05742666
4437	EST_OSR_08_APS_30-05-2019	212,16	36,82299415
4437	EST_OSR_08_APS_30-05-2019	242,73	46,97336667
4437	EST_OSR_08_APS_30-05-2019	NA	NA
4437	EST_OSR_08_APS_30-05-2019	NA	NA
4438	EST_APP_09_APS-04-06-2019	200,48	63,34152726
4438	EST_APP_09_APS-04-06-2019	258,36	84,24470045
4438	EST_APP_09_APS-04-06-2019	254,54	69,06180658
4438	EST_APP_09_APS-04-06-2019	NA	NA
4438	EST_APP_09_APS-04-06-2019	NA	NA
4439	EST_APP_10_APS_29-05-2019	318,30	59,88065195
4439	EST_APP_10_APS_29-05-2019	295,75	69,20568576
4439	EST_APP_10_APS_29-05-2019	344,30	70,16674543
4439	EST_APP_10_APS_29-05-2019	NA	NA
4439	EST_APP_10_APS_29-05-2019	NA	NA
4440	EST_APP_11_APS_30-05-2019	300,17	40,86526042
4440	EST_APP_11_APS_30-05-2019	287,47	68,72585455
4440	EST_APP_11_APS_30-05-2019	284,73	50,41243683
4440	EST_APP_11_APS_30-05-2019	NA	NA
4440	EST_APP_11_APS_30-05-2019	NA	NA
4441	EST_APP_12_APS_28-05-2019	285,36	53,78765259
4441	EST_APP_12_APS_28-05-2019	354,79	47,45813253
4441	EST_APP_12_APS_28-05-2019	357,12	69,86725959
4441	EST_APP_12_APS_28-05-2019	NA	NA
4441	EST_APP_12_APS_28-05-2019	NA	NA
4442	EST_APP_13_APS_04-06-2019	325,37	56,08070472
4442	EST_APP_13_APS_04-06-2019	360,39	61,20050035
4442	EST_APP_13_APS_04-06-2019	312,64	76,16012682
4442	EST_APP_13_APS_04-06-2019	NA	NA
4442	EST_APP_13_APS_04-06-2019	NA	NA
4443	EST_APP_14_APS-03-06-2019	257,13	55,02188434
4443	EST_APP_14_APS-03-06-2019	313,36	41,93850198
4443	EST_APP_14_APS-03-06-2019	338,14	61,03054757
4443	EST_APP_14_APS-03-06-2019	NA	NA
4443	EST_APP_14_APS-03-06-2019	NA	NA
4444	EST_OSR02_BPS_19-06-2019	336,71	58,9041689
4444	EST_OSR02_BPS_19-06-2019	301,24	58,3121021
4444	EST_OSR02_BPS_19-06-2019	334,30	54,90908497
4444	EST_OSR02_BPS_19-06-2019	NA	NA
4444	EST_OSR02_BPS_19-06-2019	NA	NA
4445	EST_OSR03_BPS_19-06-2019	204,82	32,49067118
4445	EST_OSR03_BPS_19-06-2019	195,56	29,63318635
4445	EST_OSR03_BPS_19-06-2019	258,27	32,71609317
4445	EST_OSR03_BPS_19-06-2019	NA	NA
4445	EST_OSR03_BPS_19-06-2019	NA	NA

4446	EST_OSR04_BPS_19-06-2019	325,92	67,22187257
4446	EST_OSR04_BPS_19-06-2019	365,61	48,79767552
4446	EST_OSR04_BPS_19-06-2019	319,07	51,51769325
4446	EST_OSR04_BPS_19-06-2019	NA	NA
4446	EST_OSR04_BPS_19-06-2019	NA	NA
4447	EST_OSR05_BPS_19-06-2019	283,24	57,84826681
4447	EST_OSR05_BPS_19-06-2019	340,65	64,59256712
4447	EST_OSR05_BPS_19-06-2019	354,92	58,02665888
4447	EST_OSR05_BPS_19-06-2019	NA	NA
4447	EST_OSR05_BPS_19-06-2019	NA	NA
4448	EST_OSR07_BPS_19-06-2019	319,90	44,63809302
4448	EST_OSR07_BPS_19-06-2019	375,04	55,04115003
4448	EST_OSR07_BPS_19-06-2019	328,73	41,37453839
4448	EST_OSR07_BPS_19-06-2019	NA	NA
4448	EST_OSR07_BPS_19-06-2019	NA	NA
4449	EST_OSR08_BPS_19-06-2019	207,81	51,05246922
4449	EST_OSR08_BPS_19-06-2019	259,44	44,74305916
4449	EST_OSR08_BPS_19-06-2019	208,26	57,29966388
4449	EST_OSR08_BPS_19-06-2019	NA	NA
4449	EST_OSR08_BPS_19-06-2019	NA	NA
4450	EST_APP09_BPS_19-06-2019	375,13	31,0132033
4450	EST_APP09_BPS_19-06-2019	410,98	35,75383954
4450	EST_APP09_BPS_19-06-2019	385,72	32,09066241
4450	EST_APP09_BPS_19-06-2019	NA	NA
4450	EST_APP09_BPS_19-06-2019	NA	NA
4451	EST_APP10_BPS_19-06-2019	286,71	33,22284054
4451	EST_APP10_BPS_19-06-2019	283,55	42,70769052
4451	EST_APP10_BPS_19-06-2019	286,83	41,15280487
4451	EST_APP10_BPS_19-06-2019	NA	NA
4451	EST_APP10_BPS_19-06-2019	NA	NA
4452	EST_APP11_BPS_19-06-2019	359,41	22,76105914
4452	EST_APP11_BPS_19-06-2019	305,13	34,93507535
4452	EST_APP11_BPS_19-06-2019	469,39	26,17018037
4452	EST_APP11_BPS_19-06-2019	NA	NA
4452	EST_APP11_BPS_19-06-2019	NA	NA
4453	EST_APP12_BPS_19-06-2019	372,51	30,18021599
4453	EST_APP12_BPS_19-06-2019	408,43	40,29781797
4453	EST_APP12_BPS_19-06-2019	396,49	32,7394541
4453	EST_APP12_BPS_19-06-2019	NA	NA
4453	EST_APP12_BPS_19-06-2019	NA	NA
4454	EST_APP13_BPS_19-06-2019	447,31	56,3662151
4454	EST_APP13_BPS_19-06-2019	433,26	39,18976269
4454	EST_APP13_BPS_19-06-2019	405,45	38,43237897
4454	EST_APP13_BPS_19-06-2019	NA	NA
4454	EST_APP13_BPS_19-06-2019	NA	NA
4455	EST_APP14_BPS_19-06-2019	453,05	22,86323424
4455	EST_APP14_BPS_19-06-2019	402,05	28,7138008
4455	EST_APP14_BPS_19-06-2019	412,32	25,55585287
4455	EST_APP14_BPS_19-06-2019	NA	NA
4455	EST_APP14_BPS_19-06-2019	NA	NA
4456	EST_APP15_BPS_19-06-2019	286,08	33,99648075
4456	EST_APP15_BPS_19-06-2019	277,39	35,38876975
4456	EST_APP15_BPS_19-06-2019	342,92	42,5827412
4456	EST_APP15_BPS_19-06-2019	NA	NA
4456	EST_APP15_BPS_19-06-2019	NA	NA

4457	EST_APP16_BPS_19-06-2019	474,59	32,80932191
4457	EST_APP16_BPS_19-06-2019	391,49	34,0004565
4457	EST_APP16_BPS_19-06-2019	434,97	33,48572717
4457	EST_APP16_BPS_19-06-2019	NA	NA
4457	EST_APP16_BPS_19-06-2019	NA	NA
4458	EST_OSR_01_OPS_30.05.2019	109,34	20,94887055
4458	EST_OSR_01_OPS_30.05.2019	169,27	31,17321386
4458	EST_OSR_01_OPS_30.05.2019	205,18	31,28623422
4458	EST_OSR_01_OPS_30.05.2019	NA	NA
4458	EST_OSR_01_OPS_30.05.2019	NA	NA
4459	EST_OSR_02_OPS_30.05.2019	114,48	21,48359288
4459	EST_OSR_02_OPS_30.05.2019	80,34	28,0412149
4459	EST_OSR_02_OPS_30.05.2019	151,97	15,11442835
4459	EST_OSR_02_OPS_30.05.2019	NA	NA
4459	EST_OSR_02_OPS_30.05.2019	NA	NA
4460	EST_OSR_03_OPS_05.06.2019	261,11	56,53655254
4460	EST_OSR_03_OPS_05.06.2019	199,92	58,33361506
4460	EST_OSR_03_OPS_05.06.2019	195,40	63,57462121
4460	EST_OSR_03_OPS_05.06.2019	NA	NA
4460	EST_OSR_03_OPS_05.06.2019	NA	NA
4461	EST_OSR_04_OPS_04.06.2019	146,26	51,43789286
4461	EST_OSR_04_OPS_04.06.2019	186,93	45,90717006
4461	EST_OSR_04_OPS_04.06.2019	175,71	58,00283755
4461	EST_OSR_04_OPS_04.06.2019	NA	NA
4461	EST_OSR_04_OPS_04.06.2019	NA	NA
4462	EST_OSR_05_OPS_04.06.2019	194,34	54,4599064
4462	EST_OSR_05_OPS_04.06.2019	160,19	50,97317728
4462	EST_OSR_05_OPS_04.06.2019	220,60	58,58781438
4462	EST_OSR_05_OPS_04.06.2019	NA	NA
4462	EST_OSR_05_OPS_04.06.2019	NA	NA
4463	EST_OSR_06_OPS_05.06.2019	186,13	58,06532186
4463	EST_OSR_06_OPS_05.06.2019	162,65	44,88948746
4463	EST_OSR_06_OPS_05.06.2019	208,48	48,56196988
4463	EST_OSR_06_OPS_05.06.2019	NA	NA
4463	EST_OSR_06_OPS_05.06.2019	NA	NA
4464	EST_OSR_07_OPS_03.06.2019	165,16	58,14745041
4464	EST_OSR_07_OPS_03.06.2019	220,82	45,64518226
4464	EST_OSR_07_OPS_03.06.2019	224,90	70,88260098
4464	EST_OSR_07_OPS_03.06.2019	NA	NA
4464	EST_OSR_07_OPS_03.06.2019	NA	NA
4465	EST_OSR_08_OPS_30.05.2019	102,75	47,00334005
4465	EST_OSR_08_OPS_30.05.2019	112,47	45,08728948
4465	EST_OSR_08_OPS_30.05.2019	174,18	41,13684998
4465	EST_OSR_08_OPS_30.05.2019	NA	NA
4465	EST_OSR_08_OPS_30.05.2019	NA	NA
4466	EST_APP_09_OPS_04.06.2019	173,14	33,4058397
4466	EST_APP_09_OPS_04.06.2019	136,79	35,69200743
4466	EST_APP_09_OPS_04.06.2019	175,56	37,23945725
4466	EST_APP_09_OPS_04.06.2019	NA	NA
4466	EST_APP_09_OPS_04.06.2019	NA	NA
4467	EST_APP_10_OPS_29.05.2019	101,71	45,27549107
4467	EST_APP_10_OPS_29.05.2019	107,48	33,87550663
4467	EST_APP_10_OPS_29.05.2019	132,67	49,82527045
4467	EST_APP_10_OPS_29.05.2019	NA	NA
4467	EST_APP_10_OPS_29.05.2019	NA	NA

4468	EST_APP_11_OPS_30.05.2019	179,26	48,03460099
4468	EST_APP_11_OPS_30.05.2019	194,33	38,08260996
4468	EST_APP_11_OPS_30.05.2019	181,03	31,50307496
4468	EST_APP_11_OPS_30.05.2019	NA	NA
4468	EST_APP_11_OPS_30.05.2019	NA	NA
4469	EST_APP_12_OPS_28.05.2019	139,21	34,7192579
4469	EST_APP_12_OPS_28.05.2019	116,39	36,93584269
4469	EST_APP_12_OPS_28.05.2019	182,53	42,04963694
4469	EST_APP_12_OPS_28.05.2019	NA	NA
4469	EST_APP_12_OPS_28.05.2019	NA	NA
4470	EST_APP_13_OPS_04.06.2019	196,61	48,60208167
4470	EST_APP_13_OPS_04.06.2019	160,42	62,06021152
4470	EST_APP_13_OPS_04.06.2019	209,16	50,03032701
4470	EST_APP_13_OPS_04.06.2019	NA	NA
4470	EST_APP_13_OPS_04.06.2019	NA	NA
4471	EST_APP_14_OPS_03.06.2019	225,36	50,78196506
4471	EST_APP_14_OPS_03.06.2019	242,64	46,11761897
4471	EST_APP_14_OPS_03.06.2019	207,83	38,07864142
4471	EST_APP_14_OPS_03.06.2019	NA	NA
4471	EST_APP_14_OPS_03.06.2019	NA	NA
4472	EST_APP_15_OPS_28.05.2019	137,08	40,62457616
4472	EST_APP_15_OPS_28.05.2019	154,48	46,98182974
4472	EST_APP_15_OPS_28.05.2019	174,23	45,64533006
4472	EST_APP_15_OPS_28.05.2019	NA	NA
4472	EST_APP_15_OPS_28.05.2019	NA	NA
4473	EST_APP_16_OPS_29.05.2019	173,97	49,13349871
4473	EST_APP_16_OPS_29.05.2019	129,30	40,62457616
4473	EST_APP_16_OPS_29.05.2019	131,85	31,68191262
4473	EST_APP_16_OPS_29.05.2019	NA	NA
4473	EST_APP_16_OPS_29.05.2019	NA	NA
4474	SWE_OSR_01_APS_16-6-2019	367,51	97,52864826
4474	SWE_OSR_01_APS_16-6-2019	320,55	86,28105071
4474	SWE_OSR_01_APS_16-6-2019	307,53	68,07307864
4474	SWE_OSR_01_APS_16-6-2019	NA	NA
4474	SWE_OSR_01_APS_16-6-2019	NA	NA
4475	SWE_OSR_02_APS_13-6-2019	342,33	83,88555484
4475	SWE_OSR_02_APS_13-6-2019	251,61	88,21416347
4475	SWE_OSR_02_APS_13-6-2019	245,04	68,97434852
4475	SWE_OSR_02_APS_13-6-2019	NA	NA
4475	SWE_OSR_02_APS_13-6-2019	NA	NA
4476	SWE_OSR_03_APS_16-6-2019	307,81	78,50343139
4476	SWE_OSR_03_APS_16-6-2019	337,79	84,96584445
4476	SWE_OSR_03_APS_16-6-2019	314,18	76,60538841
4476	SWE_OSR_03_APS_16-6-2019	NA	NA
4476	SWE_OSR_03_APS_16-6-2019	NA	NA
4477	SWE_OSR_04_APS_12-6-2019	282,35	66,71454859
4477	SWE_OSR_04_APS_12-6-2019	273,58	85,12551994
4477	SWE_OSR_04_APS_12-6-2019	292,90	99,36128185
4477	SWE_OSR_04_APS_12-6-2019	NA	NA
4477	SWE_OSR_04_APS_12-6-2019	NA	NA
4478	SWE_OSR_05_APS_12-6-2019	319,05	41,04861894
4478	SWE_OSR_05_APS_12-6-2019	273,63	61,82652
4478	SWE_OSR_05_APS_12-6-2019	282,16	53,51986925
4478	SWE_OSR_05_APS_12-6-2019	NA	NA
4478	SWE_OSR_05_APS_12-6-2019	NA	NA

4479	SWE_OSR_06_APS_13-6-2019	272,92	61,57800566
4479	SWE_OSR_06_APS_13-6-2019	283,69	63,3774719
4479	SWE_OSR_06_APS_13-6-2019	315,55	50,59324988
4479	SWE_OSR_06_APS_13-6-2019	NA	NA
4479	SWE_OSR_06_APS_13-6-2019	NA	NA
4480	SWE_OSR_07_APS_14-6-2019	255,55	67,01906332
4480	SWE_OSR_07_APS_14-6-2019	252,18	66,89507993
4480	SWE_OSR_07_APS_14-6-2019	301,52	47,18709838
4480	SWE_OSR_07_APS_14-6-2019	NA	NA
4480	SWE_OSR_07_APS_14-6-2019	NA	NA
4481	SWE_OSR_08_APS_16-6-2019	334,86	46,14438721
4481	SWE_OSR_08_APS_16-6-2019	305,08	41,36877383
4481	SWE_OSR_08_APS_16-6-2019	393,25	58,35511191
4481	SWE_OSR_08_APS_16-6-2019	NA	NA
4481	SWE_OSR_08_APS_16-6-2019	NA	NA
4482	SWE_APP_09_APS_17-6-2019	298,96	42,48555258
4482	SWE_APP_09_APS_17-6-2019	279,63	50,1654155
4482	SWE_APP_09_APS_17-6-2019	282,54	29,64868761
4482	SWE_APP_09_APS_17-6-2019	NA	NA
4482	SWE_APP_09_APS_17-6-2019	NA	NA
4483	SWE_APP_10_APS_12-6-2019	382,98	30,84118134
4483	SWE_APP_10_APS_12-6-2019	326,47	36,92040959
4483	SWE_APP_10_APS_12-6-2019	309,08	37,06447756
4483	SWE_APP_10_APS_12-6-2019	NA	NA
4483	SWE_APP_10_APS_12-6-2019	NA	NA
4484	SWE_APP_11_APS_15-6-2019	311,59	33,59729932
4484	SWE_APP_11_APS_15-6-2019	328,01	40,92845438
4484	SWE_APP_11_APS_15-6-2019	284,74	68,91302329
4484	SWE_APP_11_APS_15-6-2019	NA	NA
4484	SWE_APP_11_APS_15-6-2019	NA	NA
4485	SWE_APP_12_APS_14-6-2019	366,32	54,46417533
4485	SWE_APP_12_APS_14-6-2019	322,67	31,94480657
4485	SWE_APP_12_APS_14-6-2019	401,52	47,20031708
4485	SWE_APP_12_APS_14-6-2019	NA	NA
4485	SWE_APP_12_APS_14-6-2019	NA	NA
4486	SWE_APP_13_APS_14-6-2019	415,68	45,15635031
4486	SWE_APP_13_APS_14-6-2019	453,40	55,77295879
4486	SWE_APP_13_APS_14-6-2019	433,77	49,49456851
4486	SWE_APP_13_APS_14-6-2019	NA	NA
4486	SWE_APP_13_APS_14-6-2019	NA	NA
4487	SWE_APP_14_APS_15-6-2019	375,71	56,15981611
4487	SWE_APP_14_APS_15-6-2019	287,98	46,85186761
4487	SWE_APP_14_APS_15-6-2019	318,73	56,88268336
4487	SWE_APP_14_APS_15-6-2019	NA	NA
4487	SWE_APP_14_APS_15-6-2019	NA	NA
4488	SWE_APP_15_APS_13-6-2019	322,53	70,90618306
4488	SWE_APP_15_APS_13-6-2019	317,88	42,00024297
4488	SWE_APP_15_APS_13-6-2019	245,87	53,32996942
4488	SWE_APP_15_APS_13-6-2019	NA	NA
4488	SWE_APP_15_APS_13-6-2019	NA	NA
4489	SWE_APP_16_APS_16-6-2019	250,14	40,11239908
4489	SWE_APP_16_APS_16-6-2019	290,32	57,41627903
4489	SWE_APP_16_APS_16-6-2019	276,56	38,7931592
4489	SWE_APP_16_APS_16-6-2019	NA	NA
4489	SWE_APP_16_APS_16-6-2019	NA	NA

4490	SWE_OSR_01_BPS_5-6-2019	267,19	22,56468473
4490	SWE_OSR_01_BPS_5-6-2019	305,41	15,58580281
4490	SWE_OSR_01_BPS_5-6-2019	256,29	20,08147474
4490	SWE_OSR_01_BPS_5-6-2019	NA	NA
4490	SWE_OSR_01_BPS_5-6-2019	NA	NA
4491	SWE_OSR_02_BPS_5-6-2019	317,26	29,46178417
4491	SWE_OSR_02_BPS_5-6-2019	277,32	23,68047508
4491	SWE_OSR_02_BPS_5-6-2019	292,00	23,33849355
4491	SWE_OSR_02_BPS_5-6-2019	NA	NA
4491	SWE_OSR_02_BPS_5-6-2019	NA	NA
4492	SWE_OSR_03_BPS_5-6-2019	335,97	41,49030114
4492	SWE_OSR_03_BPS_5-6-2019	250,27	31,28933865
4492	SWE_OSR_03_BPS_5-6-2019	301,37	49,317256
4492	SWE_OSR_03_BPS_5-6-2019	NA	NA
4492	SWE_OSR_03_BPS_5-6-2019	NA	NA
4493	SWE_OSR_04_BPS_5-6-2019	316,88	30,51881234
4493	SWE_OSR_04_BPS_5-6-2019	306,29	31,18361667
4493	SWE_OSR_04_BPS_5-6-2019	304,07	23,66658637
4493	SWE_OSR_04_BPS_5-6-2019	NA	NA
4493	SWE_OSR_04_BPS_5-6-2019	NA	NA
4494	SWE_OSR_05_BPS_5-6-2019	276,47	41,34901045
4494	SWE_OSR_05_BPS_5-6-2019	262,53	32,7766141
4494	SWE_OSR_05_BPS_5-6-2019	231,81	27,29757111
4494	SWE_OSR_05_BPS_5-6-2019	NA	NA
4494	SWE_OSR_05_BPS_5-6-2019	NA	NA
4495	SWE_OSR_06_BPS_5-6-2019	379,37	22,6240959
4495	SWE_OSR_06_BPS_5-6-2019	333,67	19,61765269
4495	SWE_OSR_06_BPS_5-6-2019	353,08	22,87696683
4495	SWE_OSR_06_BPS_5-6-2019	NA	NA
4495	SWE_OSR_06_BPS_5-6-2019	NA	NA
4496	SWE_OSR_07_BPS_6-6-2019	240,00	24,60775584
4496	SWE_OSR_07_BPS_6-6-2019	271,73	26,00816513
4496	SWE_OSR_07_BPS_6-6-2019	258,23	19,47413328
4496	SWE_OSR_07_BPS_6-6-2019	NA	NA
4496	SWE_OSR_07_BPS_6-6-2019	NA	NA
4497	SWE_OSR_08_BPS_7-6-2019	287,07	36,70078605
4497	SWE_OSR_08_BPS_7-6-2019	250,19	46,07066981
4497	SWE_OSR_08_BPS_7-6-2019	238,27	36,78246825
4497	SWE_OSR_08_BPS_7-6-2019	NA	NA
4497	SWE_OSR_08_BPS_7-6-2019	NA	NA
4498	SWE_APP_09_BPS_11-6-2019	234,49	30,92895387
4498	SWE_APP_09_BPS_11-6-2019	250,66	28,14804804
4498	SWE_APP_09_BPS_11-6-2019	197,23	29,67168308
4498	SWE_APP_09_BPS_11-6-2019	NA	NA
4498	SWE_APP_09_BPS_11-6-2019	NA	NA
4499	SWE_APP_10_BPS_11-6-2019	136,17	27,95016628
4499	SWE_APP_10_BPS_11-6-2019	156,71	29,44305854
4499	SWE_APP_10_BPS_11-6-2019	219,09	22,31497393
4499	SWE_APP_10_BPS_11-6-2019	NA	NA
4499	SWE_APP_10_BPS_11-6-2019	NA	NA
4500	SWE_APP_11_BPS_11-6-2019	265,71	31,60672209
4500	SWE_APP_11_BPS_11-6-2019	299,58	37,33212792
4500	SWE_APP_11_BPS_11-6-2019	290,74	49,62225593
4500	SWE_APP_11_BPS_11-6-2019	NA	NA
4500	SWE_APP_11_BPS_11-6-2019	NA	NA

4501	SWE_APP_13_BPS_11-6-2019	220,59	32,13762666
4501	SWE_APP_13_BPS_11-6-2019	259,66	31,00541418
4501	SWE_APP_13_BPS_11-6-2019	305,33	42,17625794
4501	SWE_APP_13_BPS_11-6-2019	NA	NA
4501	SWE_APP_13_BPS_11-6-2019	NA	NA
4502	SWE_APP_14_BPS_11-6-2019	222,54	49,39469589
4502	SWE_APP_14_BPS_11-6-2019	304,85	43,41613313
4502	SWE_APP_14_BPS_11-6-2019	264,08	39,94550509
4502	SWE_APP_14_BPS_11-6-2019	NA	NA
4502	SWE_APP_14_BPS_11-6-2019	NA	NA
4503	SWE_APP_15_BPS_23-5-2019	245,33	28,97688217
4503	SWE_APP_15_BPS_23-5-2019	245,58	34,96113601
4503	SWE_APP_15_BPS_23-5-2019	267,55	25,29016814
4503	SWE_APP_15_BPS_23-5-2019	NA	NA
4503	SWE_APP_15_BPS_23-5-2019	NA	NA
4504	SWE_APP_16_BPS_21-5-2019	267,38	36,93780295
4504	SWE_APP_16_BPS_21-5-2019	216,17	41,32150124
4504	SWE_APP_16_BPS_21-5-2019	286,95	46,6200757
4504	SWE_APP_16_BPS_21-5-2019	NA	NA
4504	SWE_APP_16_BPS_21-5-2019	NA	NA
4505	SWE_OSR_01_OPS_7-6-2019	335,30	44,53435074
4505	SWE_OSR_01_OPS_7-6-2019	331,09	43,7039653
4505	SWE_OSR_01_OPS_7-6-2019	353,62	41,60504706
4505	SWE_OSR_01_OPS_7-6-2019	NA	NA
4505	SWE_OSR_01_OPS_7-6-2019	NA	NA
4506	SWE_OSR_02_OPS_7-6-2019	292,21	51,68544659
4506	SWE_OSR_02_OPS_7-6-2019	305,68	48,64346769
4506	SWE_OSR_02_OPS_7-6-2019	289,32	41,2253511
4506	SWE_OSR_02_OPS_7-6-2019	NA	NA
4506	SWE_OSR_02_OPS_7-6-2019	NA	NA
4507	SWE_OSR_03_OPS_2-6-2019	284,03	38,68421668
4507	SWE_OSR_03_OPS_2-6-2019	243,94	32,45806756
4507	SWE_OSR_03_OPS_2-6-2019	257,08	46,14324634
4507	SWE_OSR_03_OPS_2-6-2019	NA	NA
4507	SWE_OSR_03_OPS_2-6-2019	NA	NA
4508	SWE_OSR_04_OPS_10-6-2019	239,62	39,09613924
4508	SWE_OSR_04_OPS_10-6-2019	288,66	36,86836852
4508	SWE_OSR_04_OPS_10-6-2019	283,04	30,71246071
4508	SWE_OSR_04_OPS_10-6-2019	NA	NA
4508	SWE_OSR_04_OPS_10-6-2019	NA	NA
4509	SWE_OSR_05_OPS_29-5-2019	254,81	50,9267882
4509	SWE_OSR_05_OPS_29-5-2019	227,86	58,70518013
4509	SWE_OSR_05_OPS_29-5-2019	241,62	54,03379235
4509	SWE_OSR_05_OPS_29-5-2019	NA	NA
4509	SWE_OSR_05_OPS_29-5-2019	NA	NA
4510	SWE_OSR_06_OPS_7-6-2019	343,95	50,9267882
4510	SWE_OSR_06_OPS_7-6-2019	374,97	58,70518013
4510	SWE_OSR_06_OPS_7-6-2019	394,34	54,03379235
4510	SWE_OSR_06_OPS_7-6-2019	NA	NA
4510	SWE_OSR_06_OPS_7-6-2019	NA	NA
4511	SWE_OSR_07_OPS_3-6-2019	270,47	37,15631143
4511	SWE_OSR_07_OPS_3-6-2019	272,08	27,81941401
4511	SWE_OSR_07_OPS_3-6-2019	242,30	34,14950782
4511	SWE_OSR_07_OPS_3-6-2019	NA	NA
4511	SWE_OSR_07_OPS_3-6-2019	NA	NA

4512	SWE_OSR_08_OPS_7-6-2019	232,43	30,87503614
4512	SWE_OSR_08_OPS_7-6-2019	259,52	34,92098937
4512	SWE_OSR_08_OPS_7-6-2019	253,82	32,41107743
4512	SWE_OSR_08_OPS_7-6-2019	NA	NA
4512	SWE_OSR_08_OPS_7-6-2019	NA	NA
4513	SWE_APP_09_OPS_22-5-2019	311,67	23,86252161
4513	SWE_APP_09_OPS_22-5-2019	273,10	32,3662355
4513	SWE_APP_09_OPS_22-5-2019	340,07	24,21667851
4513	SWE_APP_09_OPS_22-5-2019	NA	NA
4513	SWE_APP_09_OPS_22-5-2019	NA	NA
4514	SWE_APP_10_OPS_3-6-2019	358,53	47,95482987
4514	SWE_APP_10_OPS_3-6-2019	437,80	51,52167403
4514	SWE_APP_10_OPS_3-6-2019	352,13	54,28540025
4514	SWE_APP_10_OPS_3-6-2019	NA	NA
4514	SWE_APP_10_OPS_3-6-2019	NA	NA
4515	SWE_APP_11_OPS_11-6-2019	295,93	35,48256279
4515	SWE_APP_11_OPS_11-6-2019	237,89	31,05273828
4515	SWE_APP_11_OPS_11-6-2019	232,38	33,22585295
4515	SWE_APP_11_OPS_11-6-2019	NA	NA
4515	SWE_APP_11_OPS_11-6-2019	NA	NA
4516	SWE_APP_12_OPS_11-6-2019	203,12	55,79417573
4516	SWE_APP_12_OPS_11-6-2019	206,65	58,1339374
4516	SWE_APP_12_OPS_11-6-2019	202,93	56,64641017
4516	SWE_APP_12_OPS_11-6-2019	NA	NA
4516	SWE_APP_12_OPS_11-6-2019	NA	NA
4517	SWE_APP_13_OPS_11-6-2019	326,47	40,91408393
4517	SWE_APP_13_OPS_11-6-2019	292,88	49,72463697
4517	SWE_APP_13_OPS_11-6-2019	199,47	48,42332705
4517	SWE_APP_13_OPS_11-6-2019	NA	NA
4517	SWE_APP_13_OPS_11-6-2019	NA	NA
4518	SWE_APP_14_OPS_11-6-2019	179,63	45,0578102
4518	SWE_APP_14_OPS_11-6-2019	214,01	45,41934007
4518	SWE_APP_14_OPS_11-6-2019	228,24	47,52085806
4518	SWE_APP_14_OPS_11-6-2019	NA	NA
4518	SWE_APP_14_OPS_11-6-2019	NA	NA
4519	SWE_APP_15_OPS_6-6-2019	281,18	57,0655066
4519	SWE_APP_15_OPS_6-6-2019	317,20	43,91897113
4519	SWE_APP_15_OPS_6-6-2019	280,20	49,37517262
4519	SWE_APP_15_OPS_6-6-2019	NA	NA
4519	SWE_APP_15_OPS_6-6-2019	NA	NA
4520	SWE_APP_16_OPS_4-6-2019	345,87	45,69855353
4520	SWE_APP_16_OPS_4-6-2019	379,15	35,27677029
4520	SWE_APP_16_OPS_4-6-2019	327,72	38,93258781
4520	SWE_APP_16_OPS_4-6-2019	NA	NA
4520	SWE_APP_16_OPS_4-6-2019	NA	NA
4521	GER_APP_09_APS_02-05-2019	316,09	46,56857523
4521	GER_APP_09_APS_02-05-2019	317,09	47,5080181
4521	GER_APP_09_APS_02-05-2019	320,94	70,11307009
4521	GER_APP_09_APS_02-05-2019	NA	NA
4521	GER_APP_09_APS_02-05-2019	NA	NA
4522	GER_APP_10_APS_02-05-2019	315,02	41,16481654
4522	GER_APP_10_APS_02-05-2019	313,91	54,22627596
4522	GER_APP_10_APS_02-05-2019	310,03	52,59924031
4522	GER_APP_10_APS_02-05-2019	NA	NA
4522	GER_APP_10_APS_02-05-2019	NA	NA

4523	GER_APP_11_APS_02-05-2019	309,46	36,94481019
4523	GER_APP_11_APS_02-05-2019	302,98	32,39522446
4523	GER_APP_11_APS_02-05-2019	365,46	46,87351897
4523	GER_APP_11_APS_02-05-2019	NA	NA
4523	GER_APP_11_APS_02-05-2019	NA	NA
4524	GER_APP_12_APS_02-05-2019	216,06	36,61579382
4524	GER_APP_12_APS_02-05-2019	325,32	28,54446343
4524	GER_APP_12_APS_02-05-2019	250,91	38,40594927
4524	GER_APP_12_APS_02-05-2019	NA	NA
4524	GER_APP_12_APS_02-05-2019	NA	NA
4525	GER_APP_13_APS_02-05-2019	298,24	29,44634468
4525	GER_APP_13_APS_02-05-2019	276,51	37,30733452
4525	GER_APP_13_APS_02-05-2019	307,16	36,28207801
4525	GER_APP_13_APS_02-05-2019	NA	NA
4525	GER_APP_13_APS_02-05-2019	NA	NA
4526	GER_APP_14_APS_02-05-2019	311,90	57,46050762
4526	GER_APP_14_APS_02-05-2019	306,45	32,14029922
4526	GER_APP_14_APS_02-05-2019	237,10	50,84493476
4526	GER_APP_14_APS_02-05-2019	NA	NA
4526	GER_APP_14_APS_02-05-2019	NA	NA
4527	GER_APP_15_APS_02-05-2019	282,81	39,01463157
4527	GER_APP_15_APS_02-05-2019	268,27	46,61253868
4527	GER_APP_15_APS_02-05-2019	271,71	51,44732272
4527	GER_APP_15_APS_02-05-2019	NA	NA
4527	GER_APP_15_APS_02-05-2019	NA	NA
4528	GER_APP_16_APS_02-05-2019	316,73	45,73083254
4528	GER_APP_16_APS_02-05-2019	354,91	41,07206767
4528	GER_APP_16_APS_02-05-2019	377,38	52,68844047
4528	GER_APP_16_APS_02-05-2019	NA	NA
4528	GER_APP_16_APS_02-05-2019	NA	NA
4529	GER_APP_09_BPS-01-07-2019	147,59	18,70777201
4529	GER_APP_09_BPS-01-07-2019	151,94	20,19553701
4529	GER_APP_09_BPS-01-07-2019	260,74	14,03659283
4529	GER_APP_09_BPS-01-07-2019	NA	NA
4529	GER_APP_09_BPS-01-07-2019	NA	NA
4530	GER_APP_10_BPS-01-07-2019	268,79	25,52518503
4530	GER_APP_10_BPS-01-07-2019	242,10	20,8220566
4530	GER_APP_10_BPS-01-07-2019	277,86	20,69456313
4530	GER_APP_10_BPS-01-07-2019	NA	NA
4530	GER_APP_10_BPS-01-07-2019	NA	NA
4531	GER_APP_11_BPS-01-07-2019	280,41	20,45071622
4531	GER_APP_11_BPS-01-07-2019	255,40	20,94264124
4531	GER_APP_11_BPS-01-07-2019	296,75	17,62236613
4531	GER_APP_11_BPS-01-07-2019	NA	NA
4531	GER_APP_11_BPS-01-07-2019	NA	NA
4532	GER_APP_12_BPS-01-07-2019	228,88	19,98960204
4532	GER_APP_12_BPS-01-07-2019	228,38	24,92812448
4532	GER_APP_12_BPS-01-07-2019	237,55	17,43263091
4532	GER_APP_12_BPS-01-07-2019	NA	NA
4532	GER_APP_12_BPS-01-07-2019	NA	NA
4533	GER_APP_13_BPS-01-07-2019	264,13	16,43299997
4533	GER_APP_13_BPS-01-07-2019	222,02	9,903325373
4533	GER_APP_13_BPS-01-07-2019	263,84	11,47244394
4533	GER_APP_13_BPS-01-07-2019	NA	NA
4533	GER_APP_13_BPS-01-07-2019	NA	NA

4534	GER_APP_14_BPS-01-07-2019	142,64	31,50730249
4534	GER_APP_14_BPS-01-07-2019	189,25	43,97764735
4534	GER_APP_14_BPS-01-07-2019	182,26	23,78478992
4534	GER_APP_14_BPS-01-07-2019	NA	NA
4534	GER_APP_14_BPS-01-07-2019	NA	NA
4535	GER_APP_15_BPS-01-07-2019	271,51	20,24438203
4535	GER_APP_15_BPS-01-07-2019	209,25	14,50847626
4535	GER_APP_15_BPS-01-07-2019	318,67	22,03630727
4535	GER_APP_15_BPS-01-07-2019	NA	NA
4535	GER_APP_15_BPS-01-07-2019	NA	NA
4536	GER_APP_16_BPS-01-07-2019	160,01	20,60158504
4536	GER_APP_16_BPS-01-07-2019	256,93	16,22538133
4536	GER_APP_16_BPS-01-07-2019	227,89	24,98217949
4536	GER_APP_16_BPS-01-07-2019	NA	NA
4536	GER_APP_16_BPS-01-07-2019	NA	NA
4537	GER_APP_09_OPS-09-05-2019	240,46	69,27099045
4537	GER_APP_09_OPS-09-05-2019	203,53	75,54571869
4537	GER_APP_09_OPS-09-05-2019	225,05	70,20721761
4537	GER_APP_09_OPS-09-05-2019	NA	NA
4537	GER_APP_09_OPS-09-05-2019	NA	NA
4538	GER_APP_10_OPS-09-05-2019	304,24	68,6912386
4538	GER_APP_10_OPS-09-05-2019	269,18	62,71294678
4538	GER_APP_10_OPS-09-05-2019	301,86	37,08420253
4538	GER_APP_10_OPS-09-05-2019	NA	NA
4538	GER_APP_10_OPS-09-05-2019	NA	NA
4539	GER_APP_11_OPS-09-05-2019	279,81	63,45168533
4539	GER_APP_11_OPS-09-05-2019	232,41	77,05391331
4539	GER_APP_11_OPS-09-05-2019	278,88	46,94016108
4539	GER_APP_11_OPS-09-05-2019	NA	NA
4539	GER_APP_11_OPS-09-05-2019	NA	NA
4540	GER_APP_12_OPS-09-05-2019	242,82	49,16801856
4540	GER_APP_12_OPS-09-05-2019	231,52	74,83129037
4540	GER_APP_12_OPS-09-05-2019	212,52	54,85977298
4540	GER_APP_12_OPS-09-05-2019	NA	NA
4540	GER_APP_12_OPS-09-05-2019	NA	NA
4541	GER_APP_13_OPS-09-05-2019	207,94	45,49952975
4541	GER_APP_13_OPS-09-05-2019	242,26	67,93235029
4541	GER_APP_13_OPS-09-05-2019	199,10	57,40996613
4541	GER_APP_13_OPS-09-05-2019	NA	NA
4541	GER_APP_13_OPS-09-05-2019	NA	NA
4542	GER_APP_14_OPS-09-05-2019	213,71	44,21717678
4542	GER_APP_14_OPS-09-05-2019	230,80	71,91787061
4542	GER_APP_14_OPS-09-05-2019	205,91	69,5389793
4542	GER_APP_14_OPS-09-05-2019	NA	NA
4542	GER_APP_14_OPS-09-05-2019	NA	NA
4543	GER_APP_15_OPS-09-05-2019	227,27	83,61454673
4543	GER_APP_15_OPS-09-05-2019	275,82	67,90354742
4543	GER_APP_15_OPS-09-05-2019	266,73	61,18710113
4543	GER_APP_15_OPS-09-05-2019	NA	NA
4543	GER_APP_15_OPS-09-05-2019	NA	NA
4544	GER_APP_16_OPS-09-05-2019	194,11	
4544	GER_APP_16_OPS-09-05-2019	191,00	76,31841273
4544	GER_APP_16_OPS-09-05-2019	149,79	60,60831179
4544	GER_APP_16_OPS-09-05-2019	NA	NA
4544	GER_APP_16_OPS-09-05-2019	NA	NA

Table S2. Planning of the sterols amino acids analyses (green: done; orange: extraction done; red: extraction to be done).

PAYS	Espèces	Culture	Total Proteins	Total Lipids	Total Glucids	Sterols	Amino acids
GBR	Apis	OSR	Green	Green	Green	Red	Orange
		APP	Green	Green	Green	Red	Orange
	Bombus	OSR	Green	Green	Green	Orange	Orange
		APP	Green	Green	Green	Orange	Orange
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
CHE	Apis	OSR	Green	Green	Green	Red	Orange
		APP	Green	Green	Green	Red	Orange
	Bombus	OSR	Green	Green	Green	Orange	Orange
		APP	Green	Green	Green	Orange	Orange
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
ESP	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Orange	Red
		APP	Green	Green	Green	Orange	Red
	Osmia	OSR	Green	Green	Green	Red	Orange
		APP	Green	Green	Green	Red	Orange
EST	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Osmia	OSR	Green	Green	Green	Red	Orange
		APP	Green	Green	Green	Red	Orange
GER	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Orange	Red
		APP	Green	Green	Green	Orange	Red
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
IRE	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Orange	Red
		APP	Green	Green	Green	Orange	Red
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
ITA	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Orange	Red
		APP	Green	Green	Green	Orange	Red
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
SWE	Apis	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Bombus	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red
	Osmia	OSR	Green	Green	Green	Red	Red
		APP	Green	Green	Green	Red	Red