### MAKING HERBARIUM & DNA VOUCHER LABELS USING EXCEL AND MS WORD

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This process works by transferring data stored in an excel spreadsheet to a custom formatted label using the "Mail Merge" tool in MS Word. This approach has several benefits over typing out each label in MS Word directly, especially with respect to consistency and speed.

#### **Organizing data in Excel spreadsheet**

The output of your label is dependent on the organization of voucher data in your Excel spreadsheet. It is important to remember that anything that you want to be present in your labels *needs* to be present in a column of your spreadsheet. So, plan your labels accordingly based on your needs. Here is an example of a spreadsheet I use for my collections – I use all of the information for herbarium labels and a subset for my DNA vouchers.

Number Flora	Pringle Herbarium	Family	Genus	Species	Authority	Country	State	County	Town	General Locality Elevation	Coordinates	Det Date	Collection	Date	Herb aria
1581 Flora of Florida, US A	Pringle Herbarium	Aquifoliaceae	Ilex	opaca	Aiton.	USA	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1581	28 May 2	D FLAS, VT
1582 Flora of Florida, USA	Pringle Herbarium	S milacaceae	Smilax	rotundifolia	L.	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1582	28 May 2	O FLAS, VT
1583 Flora of Florida, USA	Pringle Herbarium	S apindaceae	Acer	floridamım	(Chapm.) Pax	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1583	28 May 2	O FLAS, VT
1584 Flora of Florida, USA	Pringle Herbarium	S milacaceae	Smilax	smallii	Morong	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1584	28 May 2	O FLAS, VT
1585 Flora of Florida, USA	Pringle Herbarium	Oleaceae	Chionanthus	virginicus	L.	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1585	28 May 2	O FLAS, VT
1586 Flora of Florida, USA	Pringle Herbarium	Vitaceae	Vitis	cinerea	(Engelm. ex A.	CUSA	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1586	28 May 2	O FLAS, VT
1587 Flora of Florida, USA	Pringle Herbarium	Lauraceae	Cimamomir	camphora	(L.) J. Presl.	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1587	28 May 2	O FLAS, VT
1588 Flora of Florida, USA	Pringle Herbarium	Fagaceae	Quercus	nigra	L.	US A	Florida	Alachua Co.	Gainesville	In swampywoods 55 m	29.644 N, 82.359 W	May, 2018	W.L. Testo 1588	28 May 2	O FLAS, VT
1589 Flora of Florida, USA	Pringle Herbarium	Psilotaceae	Psilotum	nıdum	(L.) P. Beauv.	US A	Florida	Alachua Co.	Gainesville	In abandoned lot o 55 m	29.656 N, 82.325 W	May, 2018	W.L. Testo 1589	28 May 2	O FLAS, VT
1590 Flora of Florida, USA	Pringle Herbarium	Fabaceae	Erythrina	herbacea	L.	US A	Florida	Alachua Co.	Gainesville	Growing at edge c 55 m	29.645 N, 82.344W	May, 2018	W.L. Testo 1590	28 May 2	O FLAS, VT
1591 Flora of Florida, USA	Pringle Herbarium	Rosaceae	Crataegus	sargentii	Beadle	US A	Florida	Alachua Co.	Gainesville	San Felasco Hamz 60 m	29.7113 N, 82.4554 V	V June, 2018	W.L. Testo 1591	7 June 20	1 FLAS, VT
1592 Flora of Florida, USA	Pringle Herbarium	S ymplocaceae	Symplocus	tinctoria	(L.) L'Hér.	US A	Florida	Alachua Co.	Gainesville	San Felasco Hamz 60 m	29.7113 N, 82.4554 V	V June, 2019	W.L. Testo 1592	7 June 20	1 FLAS, VT
1593 Flora of Florida, USA	Pringle Herbarium	Fagaceae	Castanea	pumila	Michx.	US A	Florida	Alachua Co.	Gainesville	San Felasco Hamz 60 m	29.7113 N, 82.4554 V	V June, 2020	W.L. Testo 1593	7 June 20	1 FLAS, VT
1594 Flora of Florida, USA	Pringle Herbarium	Fagaceae	Quercus	laevis	Walter	US A	Florida	Alachua Co.	Gainesville	San Felasco Hamz 60 m	29.7113 N, 82.4554 V	V June, 2021	W.L. Testo 1594	7 June 20	l FLAS, VT
1595 Flora of Florida, USA	Pringle Herbarium	Dryopteridaceae			(Kunze) S mall	US A	Florida	Alachua Co.	Gainesville	San Felasco Hamr 60 m	29.7085 N, 82.4540 V		W.L. Testo 1595	7 June 20	1 FLAS, VT
1596 Flora of Florida, USA	Pringle Herbarium	S ellaginellaceae	Selaginella	hidoviciana	A. Braun	US A	Florida	Alachua Co.	Gainesville	University of Flori 50 m	29.644 N, 82.359 W	June, 2023	W.L. Testo 1596	8 June 20	l FLAS, VT

The critical thing to remember is that each column becomes an independent unit when it comes to arranging your label – the more labels, the more flexibility you have. Note that my first column is my collection number – this is to help sort and filter data at later steps (see more on this later).

### Transferring data to labels in MS Word

Once you have your collection data organized in Excel, save that file (.xlsx or .xls work fine) and open MS Word. To start the label-making process, select Mailings -> Start Mail Merge -> Step-by-Step Mail Merge Wizard. Once here, a banner will appear prompting you to Select document type. Choose Labels and click Next: Starting Document. On this page, you will be asked to select the format of your document. If this is your first time making labels with Mail Merge, you will need to click Label Options to choose a label layout that is suitable for your purposes. Once you select this option, a new window will open. Once this is open, select New label to open the Label details window. This window is full of adjustable settings for the size and organization of the labels - I have included below the settings I use for my herbarium labels and my DNA voucher labels. You may want to adjust these settings to fit your needs.

HERBARIUM LABELS						
Top margin	0.2"	Label height	3.3"			
Side margin	0.2"	Label width	3.8"			
Vertical pitch	3.4"	Number across	2			
Horizontal pitch	3.9"	Number down	3			

DNA VOUCHER LABELS						
Top margin	0.1"	Label height	2"			
Side margin	0.1"	Label width	3.5"			
Vertical pitch	2.1"	Number across	2			
Horizontal pitch	3.7"	Number down	5			

Continue to Next: Select recipients and click Browse. This will open a new window – locate the Excel spreadsheet file with your data and open it. You will receive a prompt asking you to select the sheet in which the data are stored (this is probably Sheet 1). Make sure "First row of data contains column headers" is checked and hit okay. A new window will open showing the spreadsheet data. Here you can sort or filter the data however you wish; remember that all rows of data that have a check mark will be made into a label. Uncheck/check rows as needed to select the vouchers you need to make labels for, and continue.

Continue to Next: Arrange your labels. Select More items and then select the fields from your Excel spreadsheet that you would like to use in your labels. You can either select each field and then click Insert or just double-click each field to insert it into the label. At this point, each field will appear on the label – they are flagged with double arrows and will appear like this <<Taxon Name>>. This is where you arrange the fields of the label as you wish the label to appear. If you highlight an entire field, you can also modify the font features (i.e. italicize taxon names) as needed.

Here is an example of one of my herbarium labels, organized and formatted. You may need fewer or more fields in your labels.

## «FLORA»

«Pringle Herbarium»

# «Family»

«Genus» «Species» «Authority»

«Det Date»

«COUNTRY». «State». «County»: «Town».

«General\_Locality»

«Elevation» «Coordinates»

«Collection» «Collected with» «Date»

Note that only the first label will be formatted, and the others will just show a <<New Record>> flag. When you click Update all labels the remaining labels will be populated with the same fields in the same organization. Now it is time to check on the formatting of the labels – you can always come back to this page to adjust spacing and formatting as needed.

Now, click Next: Preview your labels. This will allow you to view each label individually by clicking the double arrows in the banner. If you see any formatting errors here (spacing, font size, etc.) you can go back to Previous: Arrange your labels as needed – this may take several tries.

When you are satisfied, continue to Next: Complete the merge. Here, you will be given the option to Print or to Edit Individual Labels. Select the Edit Individual Labels — this will open a new MS Word Document with all of your labels included. You can now go through all of your labels and make final adjustments as needed; I often go through my herbarium labels to italicize the names of associate taxa that are included in my collection data, as these will not be italicized otherwise. Your labels then will be ready to print. You may get a prompt telling you that the margins of your labels are beyond the printable area — in my experience, they have printed just fine. Nonetheless, I recommend printing just one page to start so that you can check to make sure everything works.