$gnr\_resolve$
$tnrs$
$tnrs$
$_{t}nrs <- tnrs(query = splist, getpost = "POST", source = "iPlant_TNRS")Removesomefields(splist_{t}nrs <- splist_{t}nrs[,!n$

```
#            submittedName         acceptedName    sourceId score
# 5      Helanthus annuus    Helianthus annuus iPlant_TNRS  0.98
# 1        Pinos contorta       Pinus contorta iPlant_TNRS  0.96
# 7 Collomia grandiflorra Collomia grandiflora iPlant_TNRS  0.99
# 6       Rosa california     Rosa californica iPlant_TNRS  0.99
# 4      Mimulus bicolour      Mimulus bicolor iPlant_TNRS  0.98
# 3      Nicotiana glauca     Nicotiana glauca iPlant_TNRS     1
# 2         Maddia sativa         Madia sativa iPlant_TNRS  0.97
```

$_{t}nrs$

```
# [1] "Helianthus annuus"  "Pinus contorta"  "Collomia grandiflora"
# [4] "Rosa californica"  "Mimulus bicolor"  "Nicotiana glauca"
# [7] "Madia sativa"
```

$_{t}sn(searchterm = splist, searchtype = "sciname", verbose = FALSE)comnames <- lapply(tsns, getcommonnamesfromts$

```
# [1] 3 3 3 3 3 3 3
```

$_{v}ec <- do.call(c, lapply(comnames, function(x) as.character(x[1, "comname"])))Andwecanmakeadata.frameofourscien$

```
#                 spname                        comname
# 1    Helianthus annuus              common sunflower
# 2       Pinus contorta                lodgepole pine
# 3 Collomia grandiflora        largeflowered collomia
# 4     Rosa californica           California wildrose
# 5      Mimulus bicolor yellow and white monkeyflower
# 6     Nicotiana glauca                  tree tobacco
# 7         Madia sativa                 coast tarweed
```

$clas-$
$si-$
$fi-$
$ca-$
$tion$
$col\_classification$
$_{l}ist <- classification(tsns)sapply(class_{l}ist, nrow)$

```
# [1] 12 11 12 12 12 12 12
```

$\{$
$\}$
$_{d}f <- ldply(class_{l}ist, gethiernames)allnames_{d}f <- merge(allnames, class_{d}f, by.x = "spname", by.y = "Species")Nowtha$

```
#                 spname                comname Kingdom     Subkingdom
# 1 Collomia grandiflora largeflowered collomia Plantae Viridaeplantae
# 2    Helianthus annuus       common sunflower Plantae Viridaeplantae
#   Infrakingdom     Division     Subdivision Infradivision
# 1 Streptophyta Tracheophyta Spermatophytina  Angiospermae
# 2 Streptophyta Tracheophyta Spermatophytina  Angiospermae
#   Class          Superorder     Order        Family      Genus
# 1  Magnoliopsida Asteranae  Ericales Polemoniaceae   Collomia
# 2  Magnoliopsida Asteranae Asterales    Asteraceae Helianthus
```

$_{t}ree(taxa = as.character(allnames$
$tip.label <- capwords(phylogeny$
$_{g}ithub("rgbif", "ropensci")$
$_{l}ist <- occurrencelist_{m}any(as.character(allnames$
$_{l}ist(occurr_{l}ist) + guides(col = guide_{l}egend(title = "", nrow = 3, byrow = TRUE)) + theme(legend.position = "bottom", legend.k$
$_{m}ap.pdf$