

= 5 (11) and *Narcissus* , n =

7 (13) . He further subdivided these into ten sections (*Apodanthi* , *Aurelia* , *Bulbocodii* , *Ganymedes* , *Jonquillae* , *Narcissus* , *Pseudonarcissi* , *Serotini* , *Tapeinanthus* , *Tazettae*) , as did Blanchard later .

In contrast to Fernandes , Webb 's treatment of the genus for the *Flora Europaea* (1978 , 1980) prioritised morphology over genetics , and abandoned the subgenera ranks . He also restored De Candolle 's original nomenclature , and made a number of changes to section *Jonquilla* , merging the existing subsections , reducing *Apodanthi* to a subsection of *Jonquilla* , and moving *N. viridiflorus* from *Jonquilla* to a new monotypic section of its own (*Chloranthi*) . Finally , he divided *Pseudonarcissus* into two subsections . Blanchard (1990) , whose *Narcissus : a guide to wild daffodils* has been very influential , adopted a simple approach , restoring *Apodanthae* , and based largely on ten sections alone .

The Royal Horticultural Society (RHS) currently lists ten sections , based on Fernandes (1968) , three of which are monotypic (contain only one species) , while two others only containing two species . Most species are placed in *Pseudonarcissus* . While infrageneric groupings within *Narcissus* have been relatively constant , their status (genera , subgenera , sections , subsections , series , species) has not . Some authors treat some sections as being further subdivided into subsections , e.g. *Tazettae* (3 subsections) . These subdivisions correspond roughly to the popular names for narcissi types , e.g. Trumpet Daffodils , Tazettas , Pheasant 's Eyes , Hoop Petticoats , Jonquils .

While Webb had simply divided the genus into sections , Mathew found this unsatisfactory , implying every section had equal status . He adapted both Fernandes and Webb to devise a more hierarchical scheme he believed better reflected the interrelationships within the genus . Mathew 's scheme consists of three subgenera (*Narcissus* , *Hermione* and *Corbularia*) . The first two subgenera were then divided into five and two sections respectively . He then further subdivided two of the sections (subgenus *Narcissus* section *Jonquillae* , and subgenus *Hermione* section *Hermione*) into three subsections each . Finally , he divided section *Hermione* subsection *Hermione* further into two series , *Hermione* and *Albiflorae* . While lacking a phylogenetic basis , the system is still in use in horticulture . For instance the Pacific Bulb Society uses his numbering system (see Table II) for classifying species .

== Phylogenetics ==

The phylogenetic analysis of Graham and Barrett (2004) supported the infrageneric division of *Narcissus* into two clades corresponding to the subgenera *Hermione* and *Narcissus* , but does not support monophyly of all sections , with only *Apodanthi* demonstrating clear monophyly , corresponding to Clade III of Graham and Barrett (see Cladogram) , although some other clades corresponded approximately to known sections . These authors examined 36 taxa of the 65 listed then , and a later extended analysis by Rønsted et al . (2008) with five additional taxa confirmed this pattern .

A very large (375 accessions) molecular analysis by Zonneveld (2008) utilising nuclear DNA content sought to reduce some of the paraphyly identified by Graham and Barrett . This led to a revision of the sectional structure , shifting some species between sections , eliminating one section and creating two new ones . In subgenus *Hermione* , *Aurelia* was merged with *Tazettae* . In subgenus *Narcissus* section *Jonquillae* subsection *Juncifolii* was elevated to sectional rank , thus resolving the paraphyly in this section observed by Graham and Barrett in Clade II due to this anomalous subsection , the remaining species being in subsection *Jonquillae* , which was monophyletic . The relatively large section *Pseudonarcissi* was divided by splitting off a new section , *Nevadensis* (species from southern Spain) leaving species from France , northern Spain and Portugal in the parent section . At the same time Fernández @-@ Casas (2008) proposed a new monotypic section *Angustini* to accommodate *Narcissus deficiens* , placing it within subgenus *Hermione* .

While Graham and Barrett (2004) had determined that subgenus *Hermione* was monophyletic , using a much larger accession Santos @-@ Gally et al . (2011) did not . However the former had

excluded species of hybrid origins , while the latter included both *N. dubius* and *N. tortifolius* . If these two species are excluded (forming a clade with subgenus *Narcissus*) then *Hermione* can be considered monophyletic , although as a section of *Hermione* , *Tazettae* is not monophyletic . They also confirmed the monophyly of *Apodanthi* .

Some so @-@ called nothosections have been proposed , predominantly by Fernández @-@ Casas , to accommodate natural (' ancient ') hybrids (nothospecies) .

= = = Subgenera and sections = = =

Showing revisions by Zonnefeld (2008)

subgenus *Hermione* (Haw .) Spach .

(*Aurelia* (Gay) Baker (monotypic) - merged with *Tazettae* (2008)

Serotini Parlatores (2 species)

Tazettae de Candolle (16 species) syn . *Hermione* (Salisbury) Sprengel , in Fernandes ' scheme

. Incorporating *Aurelia* (2008)

subgenus *Narcissus* L.

Apodanthi A. Fernandes (6 species)

Bulbocodium de Candolle (11 species)

Ganymedes (Haworth) Schultes f . (monotypic)

Jonquillae de Candolle (8 species)

Juncifolii (A. Fern .) Zonn. sect. nov . (2008)

Narcissus L. (2 species)

Nevadensis Zonn. sect. nov . (2008)

Pseudonarcissus de Candolle (36 species) Trumpet daffodils

Tapeinanthus (Herbert) Traub (monotypic)

= = = Species = = =

Estimates of the number of species in *Narcissus* have varied widely , from anywhere between 16 to nearly 160 , even in the modern era . Linnaeus originally included six species in 1753 . By the time of the 14th edition of the *Systema Naturae* in 1784 , there were fourteen . The 1819 *Encyclopaedia Londinensis* lists sixteen (see illustration here of three species) and by 1831 Adrian Haworth had described 150 species .

Much of the variation lies in the definition of species , and whether closely related taxa are considered separate species or subspecies . Thus , a very wide view of each species , such as Webb 's results in few species , while a very narrow view such as that of Fernandes results in a larger number . Another factor is the status of hybrids , given natural hybridisation , with a distinction between ' ancient hybrids ' and ' recent hybrids ' . The term ' ancient hybrid ' refers to hybrids found growing over a large area , and therefore now considered as separate species , while ' recent hybrid ' refers to solitary plants found amongst their parents , with a more restricted range .

In the twentieth century Fernandes (1951) accepted 22 species , on which were based the 27 species listed by Webb in the 1980 *Flora Europaea* . By 1968 , Fernandes had accepted 63 species , and by 1990 Blanchard listed 65 species , and Erhardt 66 in 1993 . In 2006 the Royal Horticultural Society 's (RHS) International Daffodil Register and Classified List listed 87 species , while Zonneveld 's genetic study (2008) resulted in only 36 . As of September 2014 , the World Checklist of Selected Plant Families accepts 52 species , along with at least 60 hybrids , while the RHS has 81 accepted names in its October 2014 list .

= = Evolution = =

Within the *Narcisseae* , *Narcissus* (western Mediterranean) diverged from *Sternbergia* (Eurasia) some time in the Late Oligocene to Early Miocene eras , around 29 @. @ 3 ? 18 @. @ 1 Ma , with a best estimate of 23 @. @ 6 Ma . Later the genus divided into the two subgenera (*Hermione* and

Narcissus) between 27 @. @ 4 ? 16 @. @ 1 Ma (21 @. @ 4 Ma) . The divisions between the sections of Hermione then took place during the Miocene period 19 @. @ 9 ? 7 @. @ 8 Ma .

Narcissus appears to have arisen in the area of the Iberian peninsula , southern France and north @- @ western Italy , and within this area most sections of the genus appeared , with only a few taxa being dispersed to North Africa at a time when the African and West European platforms were closer together . Subgenus Hermione in turn arose in the southwestern mediterranean and north west Africa . However , these are reconstructions , the Amaryllidaceae lacking a fossil record .

= = Etymology = =

= = = Narcissus = = =

The derivation of the Latin narcissus (Greek : ?????????) is unknown . It may be a loanword from another language , for instance it is said to be related to the Sanskrit word nark , meaning ' hell ' . It is frequently linked to the Greek myth of Narcissus described by Ovid in his Metamorphoses , who became so obsessed with his own reflection that as he knelt and gazed into a pool of water , he fell into the water and drowned . In some variations , he died of starvation and thirst . In both versions , the narcissus plant sprang from where he died . Although Ovid appeared to describe the plant we now know as Narcissus there is no evidence for this popular derivation , and the person 's name may have come from the flower 's name . The Poet 's Narcissus (N. poeticus) , which grows in Greece , has a fragrance that has been described as intoxicating . Again , this explanation lacks any real proof and is largely discredited . Pliny wrote that the plant ? narce narcissum dictum , non a fabuloso puero ? (named narcissus from narce , not from the legendary youth) , i.e. that it was named for its narcotic properties (?????? narkao , " I grow numb " in Greek) , not from the legend . Furthermore , there were accounts of narcissi growing , such as in the legend of Persephone , long before the story of Narcissus appeared (see Greek culture) . It has also been suggested that daffodils bending over streams evoked the image of the youth admiring his own reflection in the water .

Linnaeus used the Latin name for the plant in formally describing the genus , although Matthias de l 'Obel had previously used the name in describing various species of Narcissi in his Icones stirpium of 1591 , and other publications , as had Clusius in Rariorum stirpium (1576) .

The plural form of the common name narcissus has caused some confusion . British English sources such as the Shorter Oxford English Dictionary give two alternate forms , narcissi and narcissuses . In contrast , in American English the Merriam @- @ Webster Dictionary provides for a third form , narcissus , used for both singular and plural . The Oxford dictionaries only list this third form under American English , although the Cambridge Dictionary allows of all three in the same order . However , Garner 's Modern American Usage states that narcissi is the commonest form , narcissus being excessively sibilant . For similar reasons , Fowler prefers narcissi in British English usage . Neither support narcissus as a plural form . Common names such as narcissus do not capitalise the first letter in contrast to the person of that name and the Latin genus name .

The name Narcissus (feminine Narcissa) was not uncommon in Roman times , such as Tiberius Claudius Narcissus , a Roman official in Claudius ' time , an early New Testament Christian in Rome and later bishops and saints .

= = = Daffodil = = =

The word daffodil was unknown in the English language before the sixteenth century . The name is derived from an earlier affodell , a variant of asphodel . In classical Greek literature the narcissus is frequently , referred to as the asphodel , such as the meadows of the Elysian fields in Homer (see Antiquity) . Asphodel in turn appears to be a loanword coming from French via Mediaeval Latin affodilus from Classical Latin asphodilus and ultimately the Greek asphodelos (Greek : ?????????) . The reason for the introduction of the initial d is not known , although a probable source is an

etymological merging from the Dutch article *de* , as in *de affodil* , or English *the* , as *th 'affodil* or *t 'affodil* , hence *daffodil* , and in French *de* and *affodil* to form *fleur d 'aphrodille* and *daphrodille* .

From at least the 16th century , *daffadown dilly* and *daffydowndilly* have appeared as playful synonyms of the name . In common parlance and in historical documents , the term *daffodil* may refer specifically to populations or specimens of the wild daffodil , *N. pseudonarcissus* . Ellacombe suggests this may be from *Saffon Lilly* , citing Prior in support , though admittedly conjectural .

Lady Wilkinson (1858) , who provides an extensive discussion of the etymology of the various names for this plant , suggests a very different origin , namely the Old English word *affodyle* (that which cometh early) , citing a 14th @-@ century (but likely originally much earlier) manuscript in support of this theory , and which appears to describe a plant resembling the daffodil . Ellacombe provides further support for this from a fifteenth century English translation of Palladius that also refers to it .

== = Jonquil == =

The name *jonquil* is said to be a corruption via French from the Latin *juncifolius* meaning rush @-@ leaf (*Juncaceae*) and its use is generally restricted to those species and cultivars which have rush like leaves , e.g. *N. juncifolius* .

== = Other == =

A profusion of names have attached themselves in the English language , either to the genus as a whole or to individual species or groups of species such as sections . These include *narcissus* , *jonquil* , *Lent lily* , *Lenten lily* , *lide lily* , *yellow lily* , *wort* or *wyrt* , *Julians* , *glens* , *Lent cocks* , *corn flower* , *bell rose* , *asphodel* , *Solomon 's lily* , *gracy day* , *haverdrils* , *giggary* , *cowslip* , and *crow foot* .