Schema v101.xsd

v101.xsd unqualified schema location: attribute form default: element form default: qualified

targetNamespace: http://www.tdwg.org/schemas/tcs/1.01

Elements Complex types Simple types

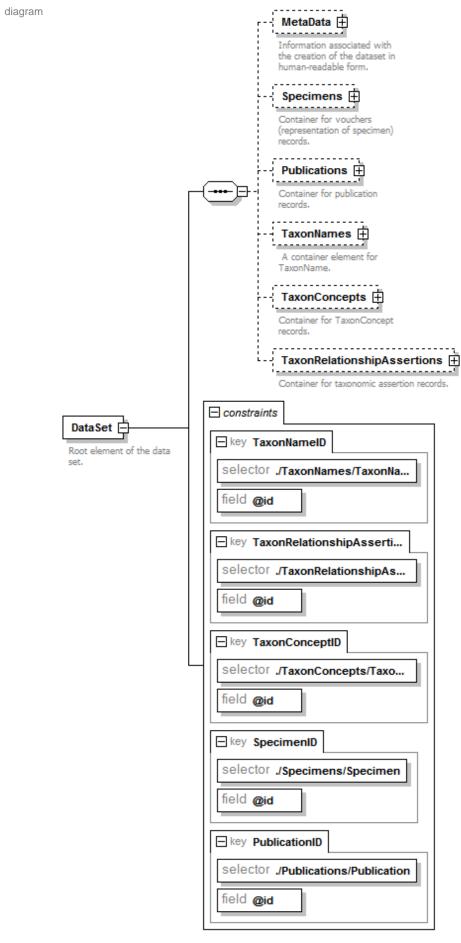
DataSet AccordingToType

NomenclaturalCodesEnum NomenclaturalTypeStatusOfUnitsEnum **AgentNames Canonical Authorship** <u>TaxonomicRankAboveSuperfamilyEnum</u> **TaxonomicRankBelowSubspeciesEnum CanonicalName NameCitation TaxonomicRankCultivatedPlants**

NomenclaturalNoteType TaxonomicRankEnum

PlaceholderType TaxonomicRankFamilyGroupEnum TaxonomicRankFamilySubdivisionEnum ReferenceType TaxonomicRankGenusGroupEnum RelationshipType **ScientificName TaxonomicRankGenusSubdivisionEnum TaxonomicRank** <u>TaxonomicRankSpeciesGroupEnum</u>

element DataSet



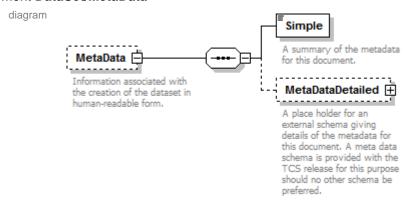
http://www.tdwg.org/schemas/tcs/1.01 namespace content complex

properties

children <u>MetaData Specimens Publications TaxonNames TaxonConcepts TaxonRelationshipAssertions</u>

constraints	key	TaxonRelationshipA ssertionID	nName ./TaxonRelationship Assertions/TaxonRel	@id
	key	TaxonConceptID	ationshipAssertion ./TaxonConcepts/Ta	@id
	key	SpecimenID	xonConcept ./Specimens/Specim en	@id
	key	PublicationID	./Publications/Public ation	@id

element DataSet/MetaData



namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0

minOcc 0 maxOcc 1 content com

content complex children Simple MetaDataDetailed

element DataSet/MetaData/Simple



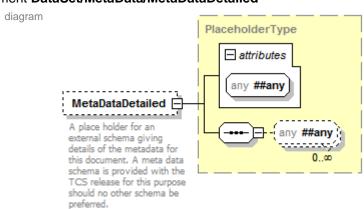
A summary of the metadata for this document.

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

 $\begin{array}{ccc} \text{properties} & & \text{isRef} & 0 \\ & \text{content} & \text{simple} \end{array}$

element DataSet/MetaData/MetaDataDetailed



namespace http://www.tdwg.org/schemas/tcs/1.01

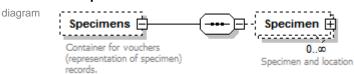
type PlaceholderType

properties isRef 0 minOcc 0 maxOcc 1

content complex

attributes Name Type Use Default Fixed

element DataSet/Specimens



namespace http://www.tdwg.org/schemas/tcs/1.01

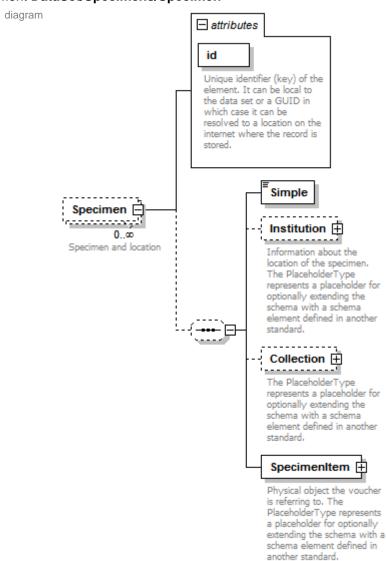
 $\begin{array}{ccc} \text{properties} & & \text{isRef} & \mathbf{0} \\ & \text{minOcc} & \mathbf{0} \end{array}$

maxOcc 1

content complex

children Specimen

element DataSet/Specimens/Specimen



namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 minOcc 0

maxOcc unbounded content complex

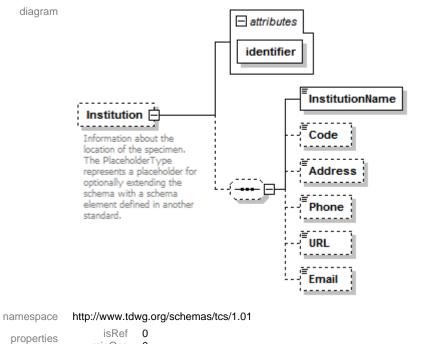
children Simple Institution Collection SpecimenItem

attributes Name Type Use Default Fixed id xs:token required

element DataSet/Specimens/Specimen/Simple



element DataSet/Specimens/Specimen/Institution



properties IsRef 0
minOcc 0
maxOcc 1
content complex

children InstitutionName Code Address Phone URL Email

attributes Name Type Use Default Fixed identifier xs:token required

element DataSet/Specimens/Specimen/Institution/InstitutionName



element DataSet/Specimens/Specimen/Institution/Code



element DataSet/Specimens/Specimen/Institution/Address

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0
minOcc 0
maxOcc 1
content simple

element DataSet/Specimens/Specimen/Institution/Phone

namespace http://www.tdwg.org/schemas/tcs/1.01
type xs:string
properties isRef 0
minOcc 0
maxOcc 1
content simple

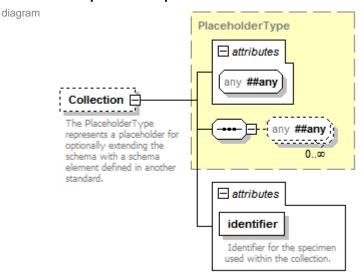
element DataSet/Specimens/Specimen/Institution/URL

namespace http://www.tdwg.org/schemas/tcs/1.01
type xs:string
properties isRef 0
minOcc 0
maxOcc 1
content simple

element DataSet/Specimens/Specimen/Institution/Email

namespace http://www.tdwg.org/schemas/tcs/1.01
type xs:string
properties isRef 0
minOcc 0
maxOcc 1
content simple

element DataSet/Specimens/Specimen/Collection



namespace http://www.tdwg.org/schemas/tcs/1.01

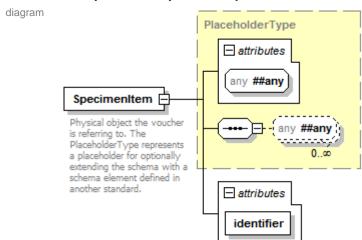
type extension of PlaceholderType

properties isRef 0 minOcc 0 maxOcc 1

content complex

attributes Name Type Use Default Fixed identifier xs:token required

element DataSet/Specimens/Specimen/SpecimenItem



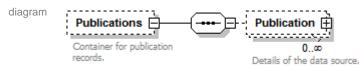
namespace http://www.tdwg.org/schemas/tcs/1.01

type extension of PlaceholderType

properties isRef 0 content complex

attributes Name Type Use Default Fixed identifier xs:token required

element DataSet/Publications



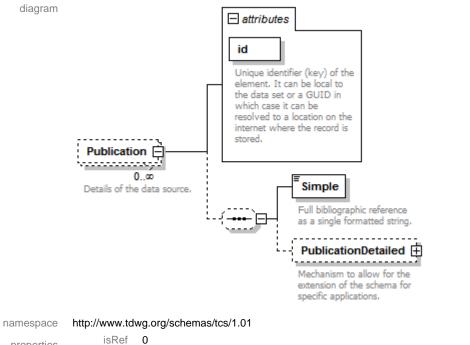
namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 minOcc 0 maxOcc 1

children

Publication

element DataSet/Publications/Publication



properties minOcc

> unbounded maxOcc content complex

Simple PublicationDetailed children

Default Name Type Use Fixed attributes id xs:token required

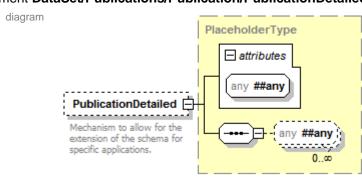
element DataSet/Publications/Publication/Simple

simple



content

element DataSet/Publications/Publication/PublicationDetailed



namespace http://www.tdwg.org/schemas/tcs/1.01

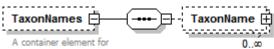
PlaceholderType type isRef 0 properties minOcc 0 maxOcc

> content complex Name

Use Default Туре Fixed attributes

element DataSet/TaxonNames

diagram



TaxonName.

An object that represents a single scientific biological name that either is, or appears to be, governed by one of the biological codes of nomenclature. These are not taxa, Taxa, whether accepted or not, are represented by TaxonConcept objects. Vernacular names are also dealt with under taxon concepts.

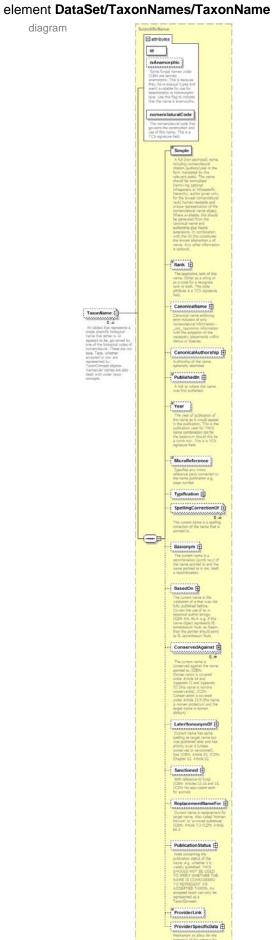
http://www.tdwg.org/schemas/tcs/1.01 namespace

isRef 0 properties

minOcc 0 maxOcc

content complex

children **TaxonName**



http://www.tdwg.org/schemas/tcs/1.01 namespace

isRef 0 properties minOcc

maxOcc unbounded complex content

children

Simple Rank CanonicalName CanonicalAuthorship PublishedIn Year MicroReference Typification SpellingCorrectionOf Basionym BasedOn ConservedAgainst LaterHomonymOf Sanctioned

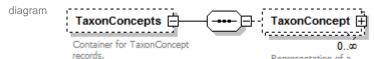
required

ReplacementNameFor PublicationStatus ProviderLink ProviderSpecificData

Name Туре Use Default Fixed attributes xs:NMTOKEN id

required isAnamorphic xs:boolean optional false NomenclaturalCod esEnum nomenclaturalCode

element DataSet/TaxonConcepts



Representation of a TaxonConcept, Various types of concept can be represented, including a reference to the GUID of an existing Concept.

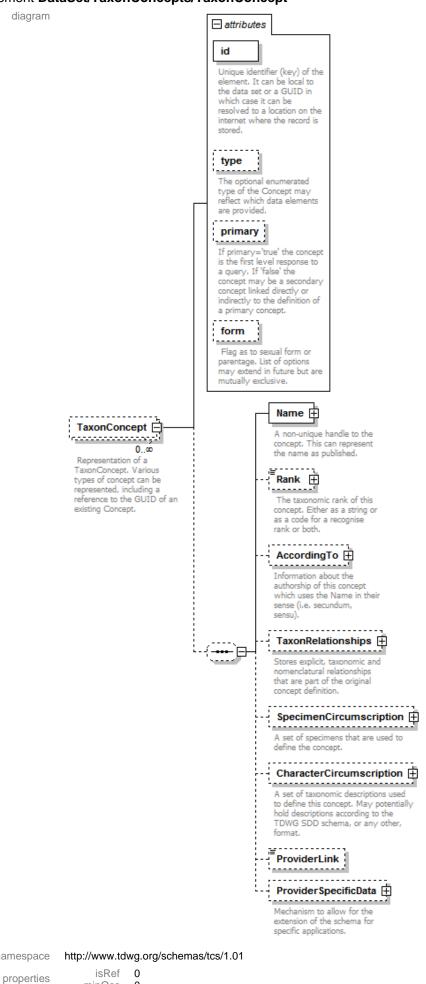
http://www.tdwg.org/schemas/tcs/1.01 namespace

isRef 0 properties minOcc

maxOcc 1 content complex

TaxonConcept children

element DataSet/TaxonConcepts/TaxonConcept



namespace

minOcc

maxOcc unbounded content complex mixed false

children Name Rank AccordingTo TaxonRelationships SpecimenCircumscription CharacterCircumscription

Fixed

ProviderLink ProviderSpecificData

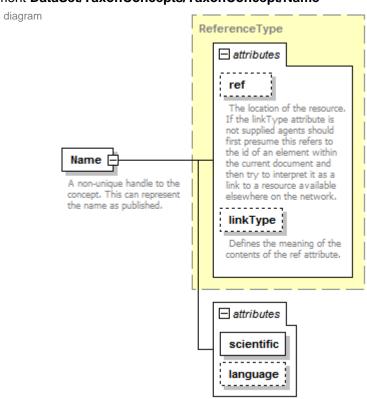
attributes Name Type Use Default

id xs:token required type derived by: optional xs:string

primary xs:boolean optional form derived by: optional

xs:string

element DataSet/TaxonConcepts/TaxonConcept/Name



namespace http://www.tdwg.org/schemas/tcs/1.01

type extension of ReferenceType

scientific

language

properties isRef 0 content complex

attributes ref xs:token optional linkType derived by:

linkType derived by: optional local xs:string

required

optional

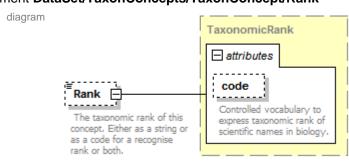
xs:boolean

xs:language

Default

Fixed

element DataSet/TaxonConcepts/TaxonConcept/Rank



namespace http://www.tdwg.org/schemas/tcs/1.01

type **TaxonomicRank**

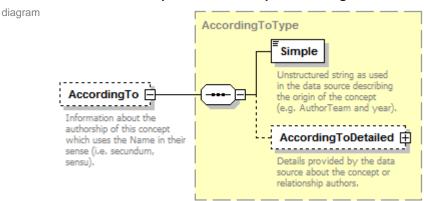
properties isRef minOcc maxOcc

content complex mixed true

attributes Name code

Type Use <u>TaxonomicRankEn</u> optional <u>um</u> Default Fixed

element DataSet/TaxonConcepts/TaxonConcept/AccordingTo



namespace http://www.tdwg.org/schemas/tcs/1.01

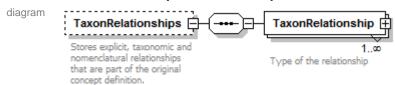
type **AccordingToType**

properties isRef 0 minOcc 0

maxOcc 1 complex

children Simple AccordingToDetailed

element DataSet/TaxonConcepts/TaxonConcept/TaxonRelationships



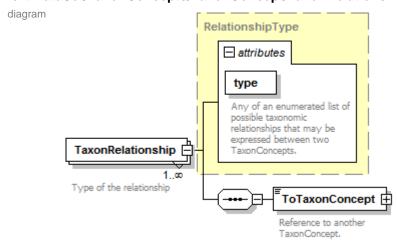
namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 minOcc 0

maxOcc 1 complex

children <u>TaxonRelationship</u>

element DataSet/TaxonConcepts/TaxonConcept/TaxonRelationships/TaxonRelationship



namespace http://www.tdwg.org/schemas/tcs/1.01

type extension of RelationshipType

properties isRef 0 minOcc 1

maxOcc unbounded content complex

ToTaxonConcept children

Use Default Fixed Name Туре attributes

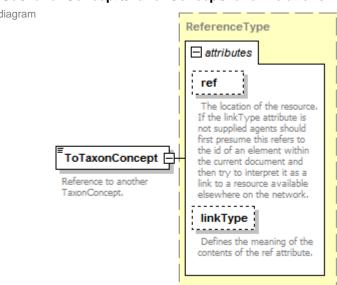
derived by: type

xs:string

element

DataSet/TaxonConcepts/TaxonConcept/TaxonRelationships/TaxonRelationship/ToTaxonConcept

required



namespace http://www.tdwg.org/schemas/tcs/1.01

> type ReferenceType

isRef 0 properties content complex

mixed true

Fixed Name Use Default Туре attributes

xs:token optional ref linkType derived by: optional local xs:string

element DataSet/TaxonConcepts/TaxonConcept/SpecimenCircumscription



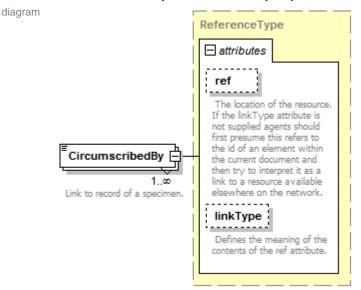
namespace http://www.tdwg.org/schemas/tcs/1.01

isRef 0 properties minOcc

maxOcc content complex

CircumscribedBy children

element DataSet/TaxonConcepts/TaxonConcept/SpecimenCircumscription/CircumscribedBy



http://www.tdwg.org/schemas/tcs/1.01 namespace

> ReferenceType type

isRef properties minOcc maxOcc

unbounded content complex mixed true Name

Type attributes ref xs:token linkType

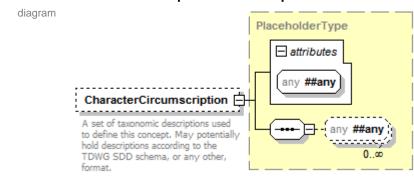
derived by: xs:string

Default

Fixed

local

element DataSet/TaxonConcepts/TaxonConcept/CharacterCircumscription



namespace http://www.tdwg.org/schemas/tcs/1.01

> **PlaceholderType** type

isRef properties minOcc 0 maxOcc

content complex Name

Use Default Type Fixed attributes

Use

optional

optional

element DataSet/TaxonConcepts/TaxonConcept/ProviderLink

diagram ProviderLink

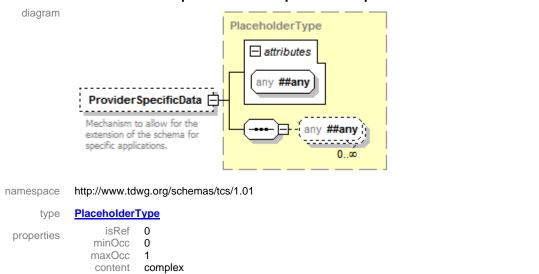
http://www.tdwg.org/schemas/tcs/1.01 namespace

> xs:string type

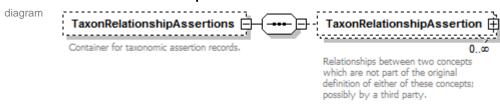
isRef 0 properties minOcc 0 maxOcc content simple

element DataSet/TaxonConcepts/TaxonConcept/ProviderSpecificData

Type



element DataSet/TaxonRelationshipAssertions



Use

Default

Fixed

namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 minOcc 0 maxOcc 1

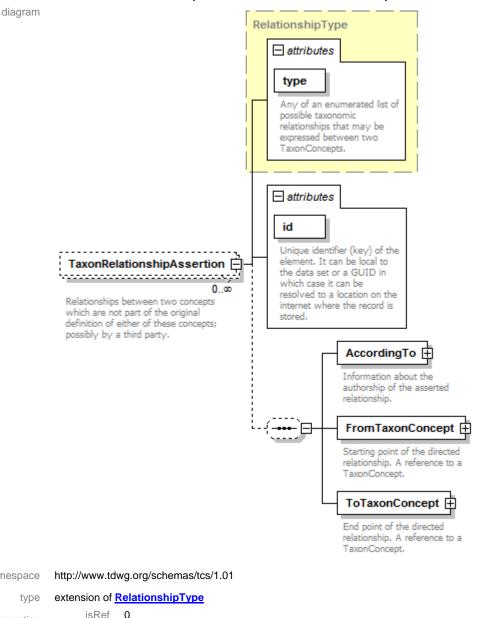
Name

attributes

maxOcc 1 content complex

children <u>TaxonRelationshipAssertion</u>

element DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion



namespace

properties minOcc

maxOcc unbounded content complex

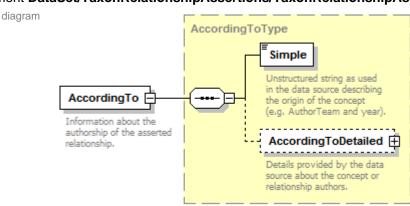
children AccordingTo FromTaxonConcept ToTaxonConcept

Name Type Use attributes type derived by: required xs:string id xs:token required

element DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion/AccordingTo

Default

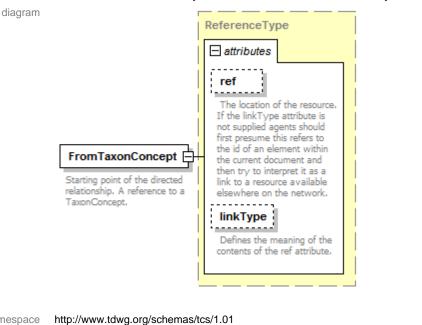
Fixed



namespace http://www.tdwg.org/schemas/tcs/1.01

AccordingToType type isRef properties complex content Simple AccordingToDetailed children

element DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion/FromTaxonConcept



namespace

extension of ReferenceType

isRef 0 properties content complex Name attributes

xs:token optional ref linkType local

derived by: optional xs:string

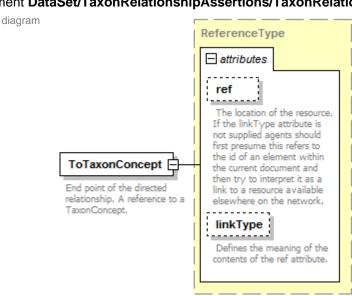
element DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion/ToTaxonConcept

Use

Default

Fixed

Fixed



xs:string

Туре

namespace http://www.tdwg.org/schemas/tcs/1.01

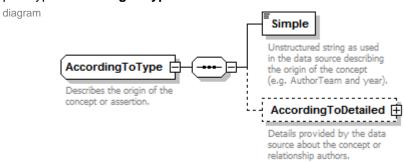
> extension of ReferenceType type

isRef 0 properties complex content

attributes

Name Use Default ref xs:token optional linkType derived by: optional local

complexType AccordingToType



namespace http://www.tdwg.org/schemas/tcs/1.01

Simple AccordingToDetailed children

<u>DataSet/TaxonConcepts/TaxonConcept/AccordingToDataSet/TaxonRelationshipAssertions/TaxonRelation</u> elements used by

shipAssertion/AccordingTo

element AccordingToType/Simple

diagram



Unstructured string as used in the data source describing the origin of the concept (e.g. AuthorTeam and year).

namespace http://www.tdwg.org/schemas/tcs/1.01

xs:string

isRef 0 properties content simple

element AccordingToType/AccordingToDetailed

diagram

AccordingToDetailed =



Details provided by the data source about the concept or relationship authors.

AuthorTeam 🗐

------This field should contain the authors of the concept. Note that the Simple sub element of this element is a signature field and should have the following content. For TCS signatures two situations are envisaged, one where concepts appear in printed publications and the other where concepts are published on-line. When representing a printed concept the field should contain the unabbreviated surnames of the authors in the order they appear in the publication separated by spaces. Initials and any punctuation marks should be omitted. If there are more than three authors only the first two author names should be included and they should be followed by the words "et al". The full authorship of the concept will always be available via the PublishedIn element. Transliteration of names should be avoided unless they can't be represented in UTF-8 encoding. If the concept is being published on line, and does not exist in a paper form, then the DNS name of the institution publishing the concept should be used. A policy should be formulated for how many sub-domains should be cited and this should be stuck to. It is recommended that the www sub-domain should not be used (e.g. ipni.org not www.ipni.org). These DNS names are not expected to resolve to anything now or in future and so artificial sub-domains could be created to represent publishing authorities within larger organisation if required. If the concept is version sensitive then the DNS name should be followed by a space and then the versioning information.

PublishedIn 🕀

Reference ID or GUID of the original publication in which the concept or relationship was introduced.

MicroReference

This is an additional qualification to the reference given by 'PublishedIn'. It for holding things such as "page 34" or "tab. 67" etc.

namespace http://www.tdwg.org/schemas/tcs/1.01

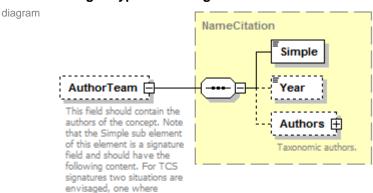
properties isRef 0

minOcc 0 maxOcc 1

content complex

children AuthorTeam PublishedIn MicroReference

element AccordingToType/AccordingToDetailed/AuthorTeam



concepts appear in printed publications and the other where concepts are published on-line. When representing a printed concept the field should contain the unabbreviated surnames of the authors in the order they appear in the publication separated by spaces. Initials and any punctuation marks should be omitted. If there are more than three authors only the first two author names should be included and they should be followed by the words "et al". The full authorship of the concept will always be available via the PublishedIn element. Transliteration of names should be avoided unless they can't be represented in UTF-8 encoding. If the concept is being published on line, and does not exist in a paper form, then the DNS name of the institution publishing the concept should be used. A policy should be formulated for how many sub-domains should be cited and this should be stuck to. It is recommended that the www sub-domain should not be used (e.g. ipni.org not www.ipni.org). These DNS names are not expected to resolve to anything now or in future and so artificial sub-domains could be created to represent publishing authorities within larger organisation if required. If the concept is version sensitive then the DNS name should be followed by a space and then the versioning information.

namespace http://www.tdwg.org/schemas/tcs/1.01

type NameCitation

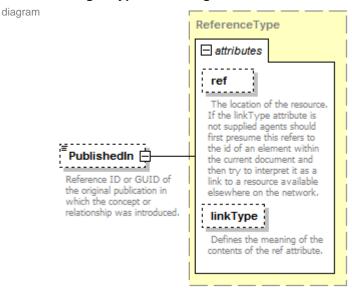
properties isRef

minOcc 0 maxOcc 1

content complex

children Simple Year Authors

element AccordingToType/AccordingToDetailed/PublishedIn



http://www.tdwg.org/schemas/tcs/1.01 namespace

> ReferenceType type

isRef properties minOcc 0 maxOcc

content complex mixed true Name

attributes ref xs:token optional linkType derived by: optional local

Use

element AccordingToType/AccordingToDetailed/MicroReference

Type

xs:string

diagram MicroReference ------

This is an additional qualification to the reference given by 'PublishedIn'. It for holding things such as "page 34" or "tab. 67" etc.

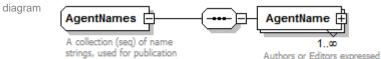
namespace http://www.tdwg.org/schemas/tcs/1.01

> xs:string type

isRef 0 properties minOcc 0

maxOcc simple content

complexType AgentNames



strings, used for publication authors or editors and for collectors, i. e. whenever the identity of an Agent is doubtful and can not associated with an Agent without doubt

only as string, e.g. in publications where the identity of creators can often not be discovered. Optionally, the ref attribute may refer to an agent if the relation between string and Agent can be assessed

Default

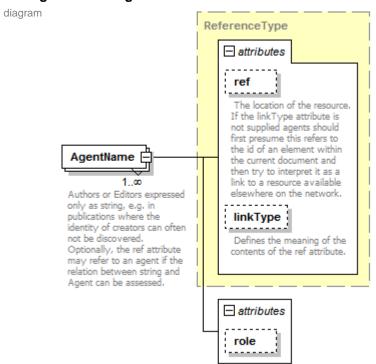
Fixed

http://www.tdwg.org/schemas/tcs/1.01 namespace

children **AgentName**

NameCitation/Authors element used by

element AgentNames/AgentName



namespace http://www.tdwg.org/schemas/tcs/1.01

> type extension of ReferenceType

isRef 0 properties

attributes

minOcc

maxOcc unbounded

content complex Name

Use Type xs:token optional linkType derived by: optional local

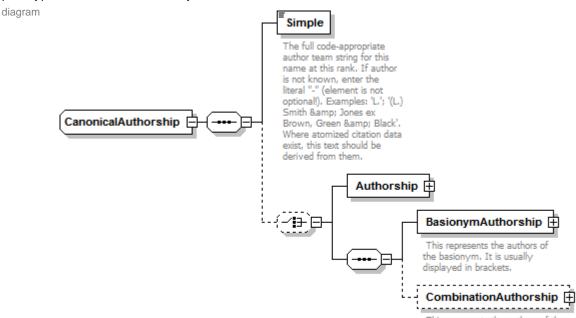
Default

Fixed

xs:string

derived by: optional role xs:Name

complexType CanonicalAuthorship



This represents the authors of the new combination of this name. The authors who come after the brackets in the traditional way of citing botanical names. These authors are not usually cited in zoology though the ICZN recommends that they should be included (Art.51G).

http://www.tdwg.org/schemas/tcs/1.01 namespace

children Simple Authorship BasionymAuthorship CombinationAuthorship

ScientificName/CanonicalAuthorship used by

element Canonical Authorship/Simple

diagram

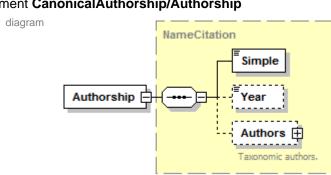


The full code-appropriate author team string for this name at this rank. If author is not known, enter the literal "-" (element is not optional!). Examples: 'L.'; '(L.) Smith & Dones ex Brown, Green & amp; Black'. Where atomized citation data exist, this text should be derived from them.

namespace http://www.tdwg.org/schemas/tcs/1.01

xs:string type isRef 0 properties content simple

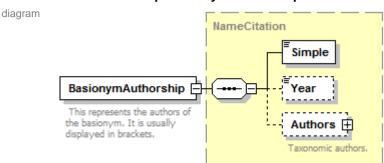
element Canonical Authorship/Authorship



namespace http://www.tdwg.org/schemas/tcs/1.01

type NameCitation
properties isRef 0
content complex
children Simple Year Authors

element CanonicalAuthorship/BasionymAuthorship



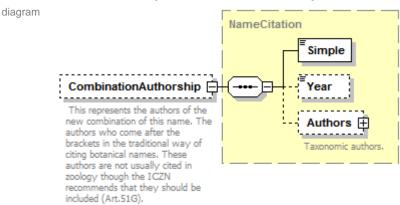
namespace http://www.tdwg.org/schemas/tcs/1.01

type NameCitation

properties isRef 0 content complex

children Simple Year Authors

element Canonical Authorship/Combination Authorship



namespace http://www.tdwg.org/schemas/tcs/1.01

type NameCitation

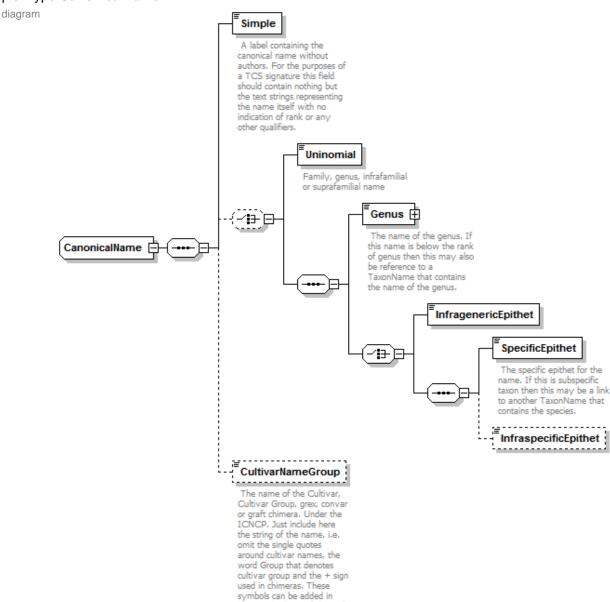
properties isRef 0 minOcc 0

maxOcc 1

content complex

children Simple Year Authors

complexType CanonicalName



namespace http://www.tdwg.org/schemas/tcs/1.01

children Simple Uninomial Genus InfragenericEpithet SpecificEpithet InfraspecificEpithet CultivarNameGroup

later on the basis of the rank of the name. The user of Group for example is language dependant.

used by element ScientificName/CanonicalName

element CanonicalName/Simple

diagram

Simple

A label containing the canonical name without authors. For the purposes of a TCS signature this field should contain nothing but the text strings representing the name itself with no indication of rank or any other qualifiers.

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 content simple

element CanonicalName/Uninomial



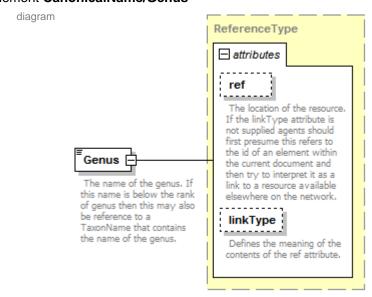
Family, genus, infrafamilial or suprafamilial name

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 content simple

element CanonicalName/Genus



namespace http://www.tdwg.org/schemas/tcs/1.01

type ReferenceType

properties isRef 0 content complex

mixed true

attributes Name Type Use Default ref xs:token optional

Fixed

linkType derived by: optional local

xs:string

element CanonicalName/InfragenericEpithet

diagram InfragenericEpithet

namespace http://www.tdwg.org/schemas/tcs/1.01

type **xs:string**perties isRef 0

properties isRef 0 content simple

element CanonicalName/SpecificEpithet

diagram SpecificEpithet

The specific epithet for the name. If this is subspecific taxon then this may be a link to another TaxonName that contains the species.

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 content simple

element CanonicalName/InfraspecificEpithet

diagram InfraspecificEpithet

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0

maxOcc 1 content simple

element CanonicalName/CultivarNameGroup

diagram

CultivarNameGroup

The name of the Cultivar, Cultivar Group, grex, convar or graft chimera. Under the ICNCP, Just include here the string of the name, i.e. omit the single quotes around cultivar names, the word Group that denotes cultivar group and the + sign used in chimeras. These symbols can be added in later on the basis of the rank of the name. The user of Group for example is language dependant.

namespace http://www.tdwg.org/schemas/tcs/1.01

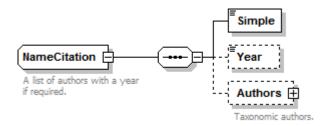
type xs:string

 $\begin{array}{ccc} \text{properties} & & \text{isRef} & \mathbf{0} \\ & \text{minOcc} & \mathbf{0} \end{array}$

maxOcc 1 content simple

complexType NameCitation

diagram



namespace http://www.tdwg.org/schemas/tcs/1.01

children Simple Year Authors

used by elements CanonicalAuthorship/Authorship AccordingToType/AccordingToDetailed/AuthorTeam

Canonical Authorship/Basionym Authorship Canonical Authorship/Combination Authorship

element NameCitation/Simple

diagram Simple

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 content simple

element NameCitation/Year

diagram



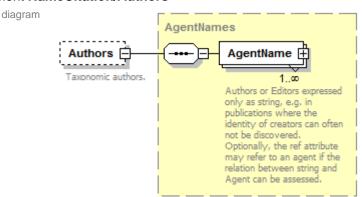
http://www.tdwg.org/schemas/tcs/1.01 namespace

> xs:gYear type

properties

isRef 0 minOcc 0 maxOcc 1 content simple

element NameCitation/Authors



namespace http://www.tdwg.org/schemas/tcs/1.01

> **AgentNames** type

properties

isRef 0 minOcc 0

maxOcc content complex

children **AgentName**

complexType NomenclaturalNoteType

diagram æ RuleConsidered article/note/recommendation in the code in question that is commented on below Note Comment concerning this name. **≡**_ RelatedName 🕀 NomenclaturalNoteType = _____ If status is conservation, the A base object that defines a rejected name and vice versa, if illegitimate because common structure for a number of elements within TaxonName. homonym the earlier homonym, etc. PublishedIn 🛨 ------The publication/reference source used to determine the nomenclatural status. MicroReference ------Specifies any minor reference parts connected to the According to publication

e.g. page number

children RuleConsidered Note RelatedName PublishedIn MicroReference

used by elements

ScientificName/BasedOn ScientificName/Basionym ScientificName/ConservedAgainst ScientificName/LaterHomonymOf ScientificName/PublicationStatus

ScientificName/ReplacementNameFor ScientificName/Sanctioned

ScientificName/SpellingCorrectionOf

element NomenclaturalNoteType/RuleConsidered

diagram RuleConsidered

The

article/note/recommendation in the code in question that is commented on below

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0

maxOcc 1 content simple

element NomenclaturalNoteType/Note

diagram

Note

Comment concerning this

name.

namespace http://www.tdwg.org/schemas/tcs/1.01

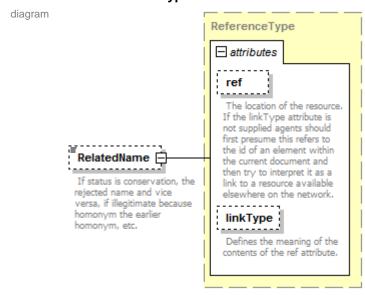
type xs:string

properties isRef 0

minOcc 0 maxOcc 1

content simple

element NomenclaturalNoteType/RelatedName



namespace http://www.tdwg.org/schemas/tcs/1.01

type ReferenceType

properties isRef 0 minOcc 0

maxOcc 1
content complex

mixed true attributes Name

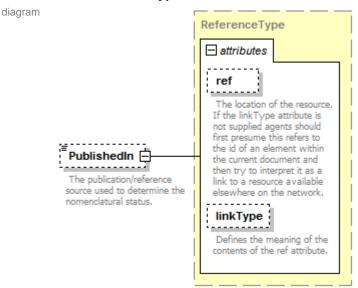
Name Type
ref xs:token
linkType derived by:
xs:string

Use optional optional

Default local

Fixed

element NomenclaturalNoteType/PublishedIn



namespace http://www.tdwg.org/schemas/tcs/1.01

type ReferenceType

properties isRef 0 minOcc 0 maxOcc 1 content complex

mixed true attributes Name Type

ref xs:token optional linkType derived by: optional local xs:string

Use

Default

Fixed

element NomenclaturalNoteType/MicroReference

diagram MicroReference

Specifies any minor reference parts connected to the According to publication e.g. page number

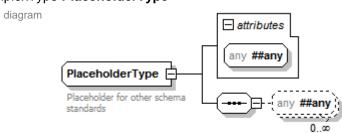
namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0 maxOcc 1

maxOcc 1 content simple

complexType PlaceholderType



namespace http://www.tdwg.org/schemas/tcs/1.01

used by elements DataSet/TaxonConcepts/TaxonConcept/CharacterCircumscription

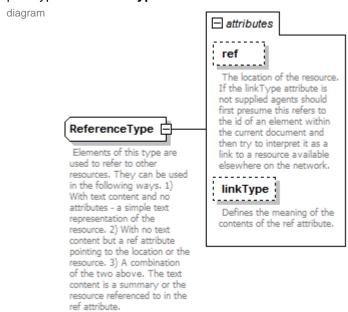
DataSet/Specimens/Specimen/Collection DataSet/MetaData/MetaDataDetailed

<u>DataSet/TaxonConcepts/TaxonConcept/ProviderSpecificData</u> <u>ScientificName/ProviderSpecificData</u> <u>DataSet/Publications/Publication/PublicationDetailed</u>

DataSet/Specimens/Specimen/SpecimenItem

attributes Name Type Use Default Fixed

complexType ReferenceType



namespace http://www.tdwg.org/schemas/tcs/1.01

properties mixed true

used by elements AgentNames/AgentName

DataSet/TaxonConcepts/TaxonConcept/SpecimenCircumscription/CircumscribedBy
DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion/FromTaxonConcept

CanonicalName/Genus

ScientificName/Typification/TypeVouchers/TypeVoucher/LectotypePublication

ScientificName/Typification/TypeName/LectotypePublication

DataSet/TaxonConcepts/TaxonConcept/Name

ScientificName/Typification/TypeName/NameReference

 $\underline{According To Type/According To Detailed/PublishedIn} \ \underline{Scientific Name/PublishedIn}$

NomenclaturalNoteType/PublishedIn NomenclaturalNoteType/RelatedName

<u>DataSet/TaxonConcepts/TaxonConcept/TaxonRelationships/TaxonRelationship/ToTaxonConceptDataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion/ToTaxonConcept</u>

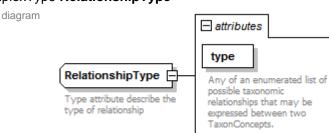
ScientificName/Typification/TypeVouchers/TypeVoucher/VoucherReference

Scientific Name Type Use Default Fi

attributes ref xs:token optional local

xs:string

complexType RelationshipType



namespace http://www.tdwg.org/schemas/tcs/1.01

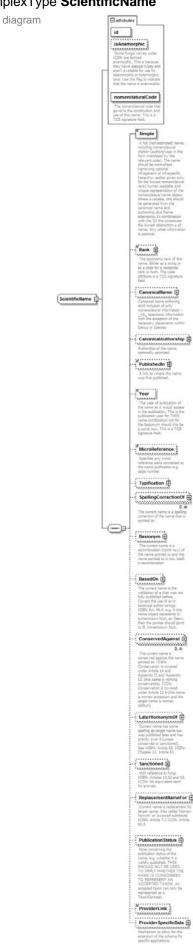
used by elements DataSet/TaxonConcepts/TaxonConcept/TaxonRelationships/TaxonRelationship

DataSet/TaxonRelationshipAssertions/TaxonRelationshipAssertion

attributes Name Type Use Default Fixed type derived by: required

xs:string

complexType ScientificName



ReplacementNameFor PublicationStatus ProviderLink ProviderSpecificData

used by

element <u>DataSet/TaxonNames/TaxonName</u>

Type

attributes

id isAnamorphic nomenclaturalCode

Name

xs:NMTOKEN xs:boolean NomenclaturalCod esEnum Use required optional required Default false

Fixed

element ScientificName/Simple

diagram

Simple

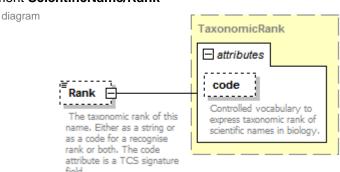
A full (non-atomized) name, including nomenclatural citation (authors/year in the form mandated by the relevant code). The name should be normalized (removing optional infrageneric or infraspecific hierarchy, author given only for the lowest nomenclatural rank) human readable and unique representation of the nomenclatoral name object. Where available, this should be generated from the canonical name and authorship plus Name extensions. In combination with the ID this constitutes the lowest abstraction a of name. Any other information is optional.

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 content simple

element ScientificName/Rank



namespace http://www.tdwg.org/schemas/tcs/1.01

<u>TaxonomicRank</u>

properties isRef minOcc

type

minOcc 0
maxOcc 1
content complex
mixed true

attributes Name code

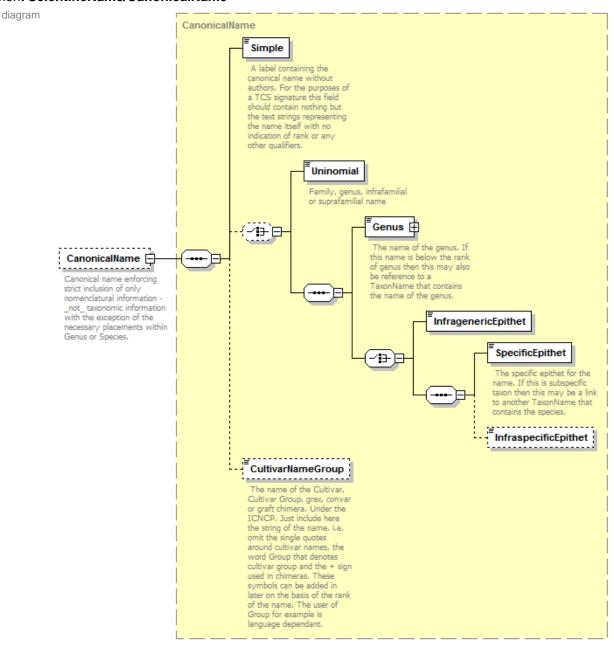
Type
TaxonomicRankEn
um

Use optional

Default

Fixed

element ScientificName/CanonicalName



namespace http://www.tdwg.org/schemas/tcs/1.01

type CanonicalName

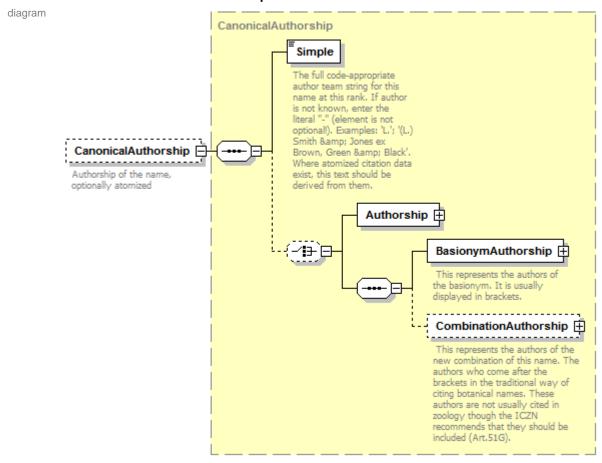
properties isRef 0

minOcc 0 maxOcc 1

content complex

children Simple Uninomial Genus InfragenericEpithet SpecificEpithet InfraspecificEpithet CultivarNameGroup

element ScientificName/CanonicalAuthorship



namespace http://www.tdwg.org/schemas/tcs/1.01

type Canonical Authorship

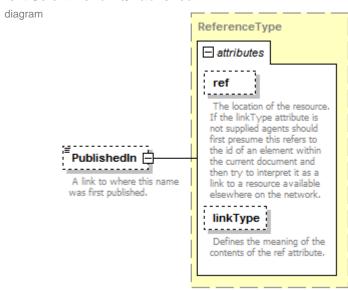
properties isRef

minOcc 0 maxOcc 1

content complex

children Simple Authorship BasionymAuthorship CombinationAuthorship

element ScientificName/PublishedIn



namespace http://www.tdwg.org/schemas/tcs/1.01

type ReferenceType

properties isRef 0 minOcc 0

maxOcc 1
content complex
mixed true

attributes

Name ref linkType Type
xs:token
derived by:
xs:string

Use optional optional Default local Fixed

element ScientificName/Year

diagram



The year of publication of the name as it would appear in the publication. This is the publication year for THIS name combination not for the basionym should this be a comb nov. This is a TCS signature field.

namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:gYear

properties isRef 0 minOcc 0 maxOcc 1

content simple

element ScientificName/MicroReference

diagram



Specifies any minor reference parts connected to the name publication e.g. page number

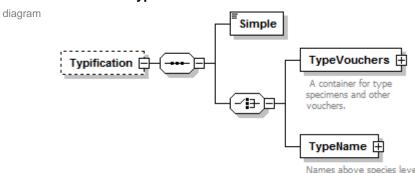
namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0

maxOcc 1 content simple

element ScientificName/Typification



Names above species level are typified by the NAME of a lower taxon.

namespace http://www.tdwg.org/schemas/tcs/1.01

 $\begin{array}{ccc} \text{properties} & & \text{isRef} & \mathbf{0} \\ & \text{minOcc} & \mathbf{0} \end{array}$

maxOcc 1 content complex

children Simple TypeVouchers TypeName

element ScientificName/Typification/Simple

diagram



namespace http://www.tdwg.org/schemas/tcs/1.01

 $\begin{array}{ccc} \text{type} & \textbf{xs:string} \\ \text{properties} & \begin{array}{ccc} \text{isRef} & \textbf{0} \\ \text{content} & \textbf{simple} \end{array}$

element ScientificName/Typification/TypeVouchers

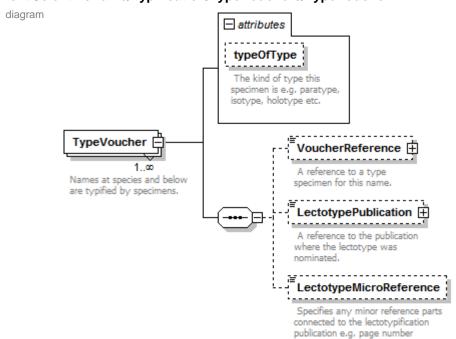


namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 content complex

children **TypeVoucher**

element ScientificName/Typification/TypeVouchers/TypeVoucher



namespace http://www.tdwg.org/schemas/tcs/1.01

 $\begin{array}{ccc} \text{properties} & \text{isRef} & 0 \\ & \text{minOcc} & 1 \end{array}$

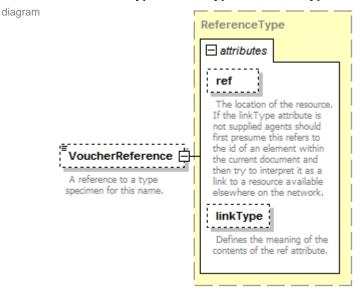
maxOcc unbounded content complex

children <u>VoucherReference</u> <u>LectotypePublication</u> <u>LectotypeMicroReference</u>

attributes Name Type Use Default Fixed typeOfType NomenclaturalType

StatusOfUnitsEnu m

element ScientificName/Typification/TypeVouchers/TypeVoucher/VoucherReference



namespace http://www.tdwg.org/schemas/tcs/1.01

> ReferenceType type

isRef properties minOcc 0 maxOcc content complex mixed true Name

attributes ref xs:token linkType derived by: xs:string

Default optional

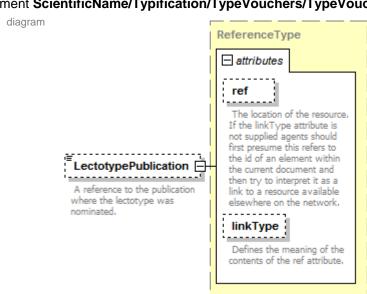
local

Fixed

element ScientificName/Typification/TypeVouchers/TypeVoucher/LectotypePublication

Use

optional



Type

namespace http://www.tdwg.org/schemas/tcs/1.01

ReferenceType

isRef 0 properties minOcc 0 maxOcc complex content mixed Name

type

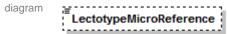
attributes

Type ref xs:token linkType derived by: xs:string

Use optional optional Default local

Fixed

element ScientificName/Typification/TypeVouchers/TypeVoucher/LectotypeMicroReference



Specifies any minor reference parts connected to the lectotypification publication e.g. page number

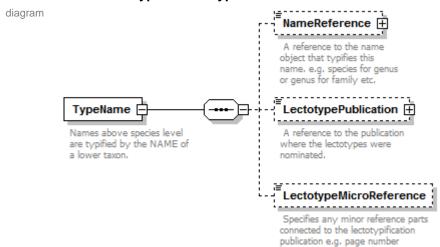
namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0

maxOcc 1 content simple

element ScientificName/Typification/TypeName

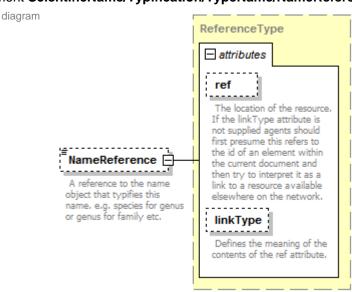


namespace http://www.tdwg.org/schemas/tcs/1.01

properties isRef 0 content complex

children NameReference LectotypePublication LectotypeMicroReference

element ScientificName/Typification/TypeName/NameReference



namespace http://www.tdwg.org/schemas/tcs/1.01

 type
 ReferenceType

 properties
 isRef
 0

 minOcc
 0

 maxOcc
 1

content complex mixed true

attributes Name

Name Type
ref xs:token
linkType derived by:
xs:string

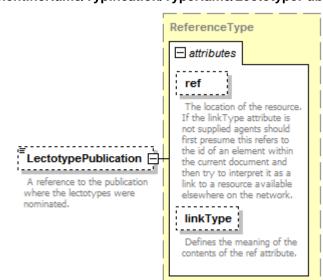
Use optional optional

Default

local

Fixed

element ScientificName/Typification/TypeName/LectotypePublication



namespace http://www.tdwg.org/schemas/tcs/1.01

type ReferenceType

properties isRef 0 minOcc 0 maxOcc 1

content complex mixed true

attributes Name Type Use Default Fixed

ref xs:token optional linkType derived by: optional local xs:string

element ScientificName/Typification/TypeName/LectotypeMicroReference

diagram LectotypeMicroReference

Specifies any minor reference parts connected to the lectotypification publication e.g. page number

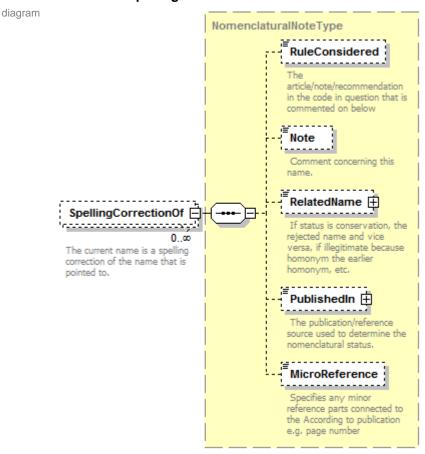
namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0

minOcc 0 maxOcc 1 content simple

element ScientificName/SpellingCorrectionOf



namespace http://www.tdwg.org/schemas/tcs/1.01

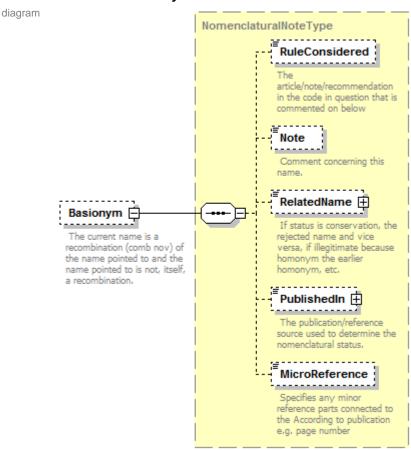
type NomenclaturalNoteType

properties isRef 0

minOcc 0 maxOcc unbounded

maxOcc unbounded content complex

element ScientificName/Basionym



namespace http://www.tdwg.org/schemas/tcs/1.01

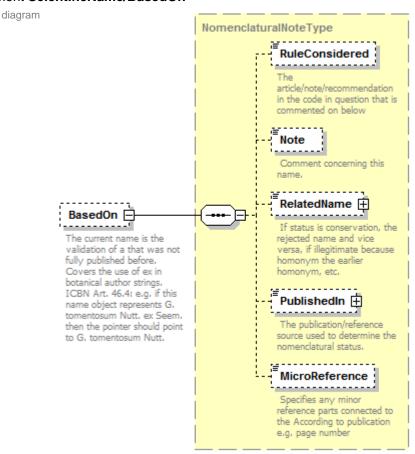
type NomenclaturalNoteType

properties isRef

isRef 0 minOcc 0 maxOcc 1

content complex

element ScientificName/BasedOn



namespace http://www.tdwg.org/schemas/tcs/1.01

type NomenclaturalNoteType

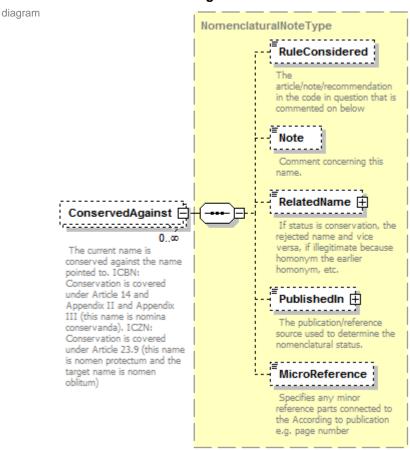
properties

isRef 0 minOcc 0

maxOcc 1

content complex

element ScientificName/ConservedAgainst



namespace http://www.tdwg.org/schemas/tcs/1.01

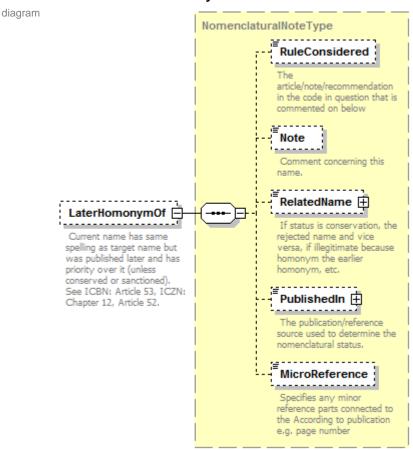
type NomenclaturalNoteType

properties isRef 0

minOcc 0 maxOcc unbounded

content complex

element ScientificName/LaterHomonymOf



namespace http://www.tdwg.org/schemas/tcs/1.01

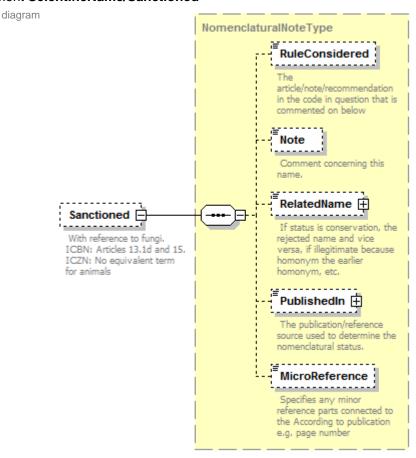
type NomenclaturalNoteType

properties isRef 0 minOcc 0

minOcc 0 maxOcc 1

content complex

element ScientificName/Sanctioned



http://www.tdwg.org/schemas/tcs/1.01 namespace

> **NomenclaturalNoteType** type

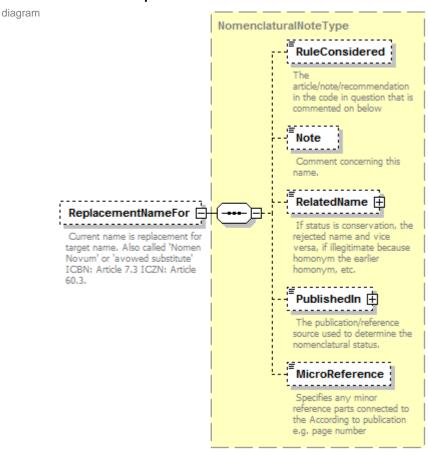
isRef 0 properties minOcc 0

maxOcc

1

complex content

element ScientificName/ReplacementNameFor



namespace http://www.tdwg.org/schemas/tcs/1.01

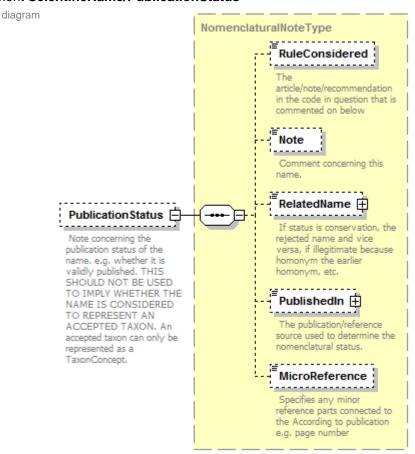
type NomenclaturalNoteType

properties isRef 0 minOcc 0

minOcc 0 maxOcc 1

content complex

element ScientificName/PublicationStatus



namespace http://www.tdwg.org/schemas/tcs/1.01

type NomenclaturalNoteType

 $\begin{array}{ccc} \text{properties} & & \text{isRef} & \mathbf{0} \\ & \text{minOcc} & \mathbf{0} \end{array}$

maxOcc 1 complex

children RuleConsidered Note RelatedName PublishedIn MicroReference

element ScientificName/ProviderLink

diagram ProviderLink

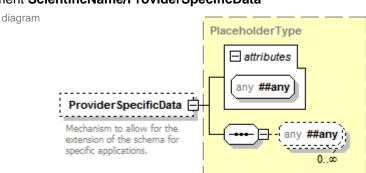
namespace http://www.tdwg.org/schemas/tcs/1.01

type xs:string

properties isRef 0 minOcc 0

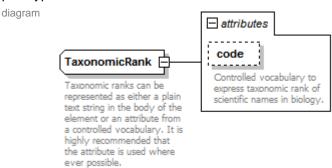
maxOcc 1 content simple

element ScientificName/ProviderSpecificData





complexType TaxonomicRank



namespace http://www.tdwg.org/schemas/tcs/1.01

properties mixed true

used by elements DataSet/TaxonConcepts/TaxonConcept/Rank ScientificName/Rank

attributes Name Type Use Default Fixed

code <u>TaxonomicRankEn</u> optional

<u>um</u>

simpleType NomenclaturalCodesEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

type restriction of xs:Name

used by attribute <u>ScientificName/@nomenclaturalCode</u>

facets enumeration Viral

enumeration Bacteriological Botanical Zoological CultivatedPlant Indeterminate

simpleType NomenclaturalTypeStatusOfUnitsEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

type restriction of xs:Name

used by attribute ScientificName/Typification/TypeVouchers/TypeVoucher/@typeOfType

enumeration allo facets enumeration allolecto alloneo enumeration enumeration CO enumeration epi enumeration ex exepi enumeration enumeration exholo enumeration enumeration exlecto exneo enumeration enumeration expara enumeration exsyn hapanto enumeration enumeration holo enumeration icono enumeration iso isolecto enumeration

enumeration

enumeration isosyn enumeration lecto enumeration neo enumeration para enumeration paralecto

isoneo

enumeration paraneo enumeration plasto plastoholo enumeration enumeration plastoiso enumeration plastolecto plastoneo enumeration plastopara enumeration enumeration plastosyn enumeration sec supp enumeration enumeration syn enumeration topo enumeration type enumeration

simpleType TaxonomicRankAboveSuperfamilyEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

> type restriction of xs:Name

simpleType **TaxonomicRankEnum** used by enumeration infraord facets enumeration subord enumeration ord enumeration superord infracl enumeration enumeration subcl enumeration cl enumeration supercl infraphyl_div enumeration enumeration subphyl_div enumeration phyl_div enumeration superphyl_div enumeration infrareg subreg enumeration enumeration reg superreg enumeration

simpleType TaxonomicRankBelowSubspeciesEnum

dom taxsupragen

namespace http://www.tdwg.org/schemas/tcs/1.01

restriction of xs:Name

enumeration

enumeration

type simpleType **TaxonomicRankEnum** used by enumeration cand facets enumeration taxinfrasp enumeration fsp enumeration subsubfm enumeration subfm enumeration fm enumeration subsubvar enumeration subvar enumeration var enumeration enumeration bv

simpleType TaxonomicRankCultivatedPlants

namespace http://www.tdwg.org/schemas/tcs/1.01

enumeration

restriction of xs:Name

simpleType <u>TaxonomicRankEnum</u> used by

facets

enumeration cv enumeration convar enumeration grex enumeration cvgroup graftchimaera enumeration enumeration denomclass

infrasp

simpleType TaxonomicRankEnum

http://www.tdwg.org/schemas/tcs/1.01 namespace

union of (TaxonomicRankBelowSubspeciesEnum, TaxonomicRankSpeciesGroupEnum,

used by

TaxonomicRank/@code

simpleType TaxonomicRankFamilyGroupEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

> restriction of xs:Name type

TaxonomicRankEnum simpleType used by

infrafam enumeration facets enumeration subfam enumeration fam enumeration superfam

simpleType TaxonomicRankFamilySubdivisionEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

> type restriction of xs:Name

simpleType **TaxonomicRankEnum** used by

infratrib enumeration facets enumeration subtrib enumeration trib enumeration supertrib

simpleType TaxonomicRankGenusGroupEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

> restriction of xs:Name type

TaxonomicRankEnum simpleType used by

infragen enumeration facets enumeration subgen enumeration aen

simpleType TaxonomicRankGenusSubdivisionEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

restriction of xs:Name type

TaxonomicRankEnum simpleType used by

enumeration aggr facets enumeration taxinfragen enumeration subser enumeration ser subsect enumeration enumeration

simpleType TaxonomicRankSpeciesGroupEnum

namespace http://www.tdwg.org/schemas/tcs/1.01

> type restriction of xs:Name

TaxonomicRankEnum simpleType used by

subsp_aggr enumeration facets enumeration ssp

enumeration