Table S1: Biophysical data for the four study sites.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Strandveld | Limestone Fynbos | Sand Fynbos  | Renosterveld  |
| Nature reserve | Gouritz Mouth Local Authority Nature Reserve | Pauline Bohnen Local Authority Nature Reserve | Rein’s Private Nature Reserve | Werner Frehze Local Authority Nature Reserve |
| Plot coordinates | 34̊ 21’17.38”S; 21̊ 52’28.65”E | 34̊ 21’55.62”S; 21̊ 25’26.00”E | 34̊ 20’40.87”S; 21̊ 45’59.80”E | 34̊ 06’58.25”; 21̊ 14’59.70”E |
| MAP (mm) | 352 | 510 | 352 | 378 |
| Soil description | Deep alkaline sand; moderately fertile | Shallow, alkaline sand overlying limestone; infertile | Deep, leached, acid sand: infertile | Shallow, slightly acid loam overlying clayey sub-soil; moderately fertile |
| Dominant species | Cassine peragua(Celastraceae)Eriocephalus africanus(Asteraceae)Osteospermum moniliferum(Asteraceae)Rhoicissus digitata(Vitaceae)Sideroxylon inerme(Sapotaceae)Zygophyllum morgsana(Zygophyllaceae) | Erica spectabilis (Ericaceae)Ischyrolepis leptocladus (Restionaceae)Leucadendron meridianum(Proteaceae)Metalasia muricata (Asteraceae)Stoebe muirrii(Asteraceae)Thamnochortus muirrii(Restionaceae) | Cliffortia illicifolia(Rosaceae)Erica dispar(Ericaceae)Leucadendron eucalyptifolium(Proteaceae)Leucospermum praecox(Proteaceae) Protea susannae(Proteaceae) Thamnochortus insignis(Restionaceae)Watsonia fourcadei(Iridaceae) | Aloe ferox(Asphodelaceae) Elytropappus rhinocerotis(Asteraceae) Ehrharta calycina (Poaceae)Eriocephalus africanus(Asteraceae) Metalasia pungens(Asteraceae) Themeda triandra(Poaceae)  |

Table S2. List of edible plant species found in each plot situated within a prominent vegetation type along the southern Cape lowlads of South Africa. The list is divided into underground storage organs and aboveground carbohydrates.

|  |  |  |
| --- | --- | --- |
| **Vegetation** | **Carbohydrate category** | **Species** |
| Renosterveld | Underground storage organ | Babiana patula; Cyphia digitata; Freesia caryophyllacea; Freesia leichtlinii; Pelargonium lobatum; Pelargonium rapaceum; Watsonia aletroides; Watsonia meriana |
|  | Aboveground | Carissa bispinosa (fruit); Diospyros dichrophylla (fruit); Microloma sagittatum (fruit); Muraltia spinosa (fruit); Osteospermum moniliferum (fruit); Osyris compressa (fruit); Searsia glauca (fruit); Sideroxylon inerme (fruit) |
| Limestone Fynbos | Underground storage organ | Babiana patula; Cyanella lutea; Cyphia digitata; Ferraria crispa; Freesia alba; Gladiolus cunonius; Gladiolus exilis; Gladiolus floribundus; Gladiolus virescens; Hesperantha falcata; Ixia micrandra; Moraea fugax; Pelargonium dipetalum; Pelargonium lobatum; Pelargonium triste; Rhoicissus digitata; Romulea rosea; Trachyandra ciliata; Trachyandra revoluta; Tritonia squalida; Watsonia fergusoniae |
|  | Aboveground | Astephanus triflorus (seedpods); Carissa bispinosa (fruit); Carpobrotus acinaciformis (fruit); Carpobrotus edulis (fruit); Cassine tetragona (fruit); Cynanchum obtusifolium (fruit); Euclea racemosa (fruit); Muraltia spinosa (fruit); Olea exasperata (fruit); Osteospermum moniliferum (fruit); Osyris compressa (fruit, seed); Searsia glauca (fruit); Searsia lucida (fruit); Sideroxylon inerme (fruit); Tetragonia decumbens (leaves); Trachyandra ciliata (inflorescences); Trachyandra revoluta (inflorescences); Zygophyllum morgsana (seed) |
| Sand Fynbos | Underground storage organ | Gladiolus guthriei; Gladiolus rogersii; Pelargonium triste; Trachyandra revoluta; Watsonia fourcadei |
|  | Aboveground | Carpobrotus edulis (fruit); Diospyros dichrophylla (fruit); Osteospermum moniliferum (fruit); Searsia glauca (fruit); Trachyandra revoluta (inflorescences) |
| Strandveld | Underground storage organ | Babiana patula; Chasmanthe aethiopica; Cyanella lutea; Cyphia digitata; Ferraria crispa; Freesia alba; Gladiolus floribundus; Oxalis pes-caprae; Pelargonium lobatum; Pelargonium triste; Rhoicissus digitata; Romulea rosea; Trachyandra ciliata; Trachyandra revoluta; Tritonia crocata |
|  | Aboveground | Carissa bispinosa (fruit); Carpobrotus acinaciformis (fruit); Cassine tetragona (fruit); Muraltia spinosa (fruit); Olea exasperata (fruit); Osteospermum moniliferum (fruit); Schotia afra (seed); Searsia glauca (fruit); Sideroxylon inerme (fruit); Tetragonia decumbens (leaves); Trachyandra ciliata (inflorescences); Trachyandra revoluta (inflorescences); Zygophyllum morgsana (seed) |

Table S3.1. Species list of USOs (on left) and fruiting species (aboveground carbohydrate resources) (on right) and their acronyms encountered in the Phenology survey of the four basic vegetation types of the southern Cape lowlands to coastal margin.

|  |  |  |  |
| --- | --- | --- | --- |
| USOs per study site/vegetation type | Acronym | Fruiting species per study site/vegetation type | Acronym |
| **Strandveld** |  | **Strandveld**  |  |
| *Babiana patulla* | BAB PAT | *Carissa bispinosa* (fruit) | CAR BIS |
| *Chasmanthe aetiopica* | CHA AET | *Carpobrotus acinaciformis* (fruit) | CAR ACI |
| *Cyanella lutea* | CYA LUT | *Cassine tetragona* (fruit) | CAS TET |
| *Cyphia digitata* | CYP DIG | *Muraltia spinosa* (fruit) | MUR SPI |
| *Ferraria crispa* | FER CRI | *Olea exasperata* (fruit) | OLE EXA |
| *Freesia alba* | FRE ALB | *Osteospermum moniliferum (*fruit) | OST MON |
| *Gladiolus floribundus* | GLA FLO | *Schotia afra* (seed) | SCH AFR |
| *Oxalis pes-caprae* | OXA PES | *Searsia glauca* (fruit) | SEA GLA |
| *Pelargonium lobatum* | PEL LOB | *Sideroxylon inerme* (fruit) | SID INE |
| *Pelargonium triste* | PEL TRI | *Tetragonia decumbens* (veg.) | TET DEC |
| *Rhoicissus digitata* | RHO DIG | *Trachyandra ciliata* (veg.) | TRA CIL |
| *Romulea rosea* | ROM ROS | *Trachyandra revoluta* (veg.) | TRA REV |
| *Trachyandra ciliata* | TRA CIL | *Zygophyllum morgsana* (seed) | ZYG MOR |
| *Trachyandra revoluta* | TRA REV |  |  |
| *Tritonia crocata* | TRI CRO |  |  |
| **Limestone Fynbos** |  | **Limestone Fynbos**  |  |
| *Babiana patulla* | BAB PAT | *Astephanus triflorus* (veg.) | AST TRI |
| *Cyanella lutea* | CYA LUT | *Carissa bispinosa* (fruit) | CAR BIS |
| *Cyphia digitata* | CYP DIG | *Carpobrotus acinaciformis* (fruit) | CAR ACI |
| *Ferraria crispa* | FER CRI | *Carpobrotus edulis* (fruit) | CAR EDU |
| *Freesia alba* | FRE ALB | *Cassine tetragona* (fruit) | CAS TET |
| *Gladiolus cunonius* | GLA CUN | *Cynanchum obtusifolium* (fruit) | CYN OBT |
| *Gladiolus exilis* | GLA EXI | *Euclea racemosa* (fruit) | EUC RAC |
| *Gladiolus floribundus* | GLA FLO | *Muraltia spinosa* (fruit) | MUR SPI |
| *Gladiolus virescens* | GLA VIR | *Olea exasperata* (fruit) | OLE EXA |
| *Hesperantha falcata* | HES FAL | *Osteospernum moniliferum* (fruit) | OST MON |

|  |  |  |  |
| --- | --- | --- | --- |
| *Ixia micandra* | IXI MIC | *Osyris compressa* (fruit, seed) | OSY COM |
| *Moraea fugax* | MOR FUG | *Searsia glauca* (fruit) | SEA GLA |
| *Pelargonium dipetalum* | PEL DIP | *Searsia lucida* (fruit) | SEA LUC |
| *Pelargonium lobatum* | PEL LOB | *Sideroxylon inerme* (fruit) | SID INE |
| *Pelargonium triste* | PEL TRI | *Tetragonia decumbens* (veg.) | TET DEC |
| *Rhoicissus digitata* | RHO DIG | *Trachyandra ciliata* (veg.) | TRA CIL |
| *Romulea rosea* | ROM ROS | *Trachyandra revoluta* (veg.) | TRA REV |
| *Trachyandra ciliata* | TRA CIL | *Zygophyllum morgsana* (seed) | ZYG MOR |
| *Trachyandra revoluta* | TRA REV |  |  |
| *Tritonia squalida* | TRI SQU |  |  |
| *Watsonia fergusoniae* | WAT FER |  |  |
| **Renosterveld** |  | **Renosterveld**  |  |
| *Babiana patulla* | BAB PAT | *Carissa bispinosa* (fruit) | CAR BIS |
| *Cyphia digitata* | CYP DIG | *Diospyros dichrophylla* (fruit) | DIO DIC |
| *Freesia caryophyllacea* | FRE CAR | *Microloma saggitatum* (veg.) | MIC SAG |
| *Freesia leichtlinii* | FRE LEI | *Muraltia spinosa* (fruit) | MUR SPI |
| *Pelargonium lobatum* | PEL LOB | *Osteospermum moniliferum* (fruit) | OST MON |
| *Pelargonium repaceum* | PEL REP | *Osyris compressa* (fruit) | OSY COM |
| *Watsonia alletroides* | WAT ALL | *Searsia glauca* (fruit) | SEA GLA |
| *Watsonia meriana* | WAT MER | *Sideroxylon inerme* (fruit) | SID INE |
| **Sand Fynbos** |  | **Sand Fynbos** |  |
| *Gladiolus guthriei* | GLA GUT | *Carpobrotus edulis* (fruit) | CAR EDU |
| *Gladiolus rogersii* | GLA ROG | *Diospyros dichrophylla* (fruit) | DIO DIC |
| *Pelargonium triste* | PEL TRI | *Osteospernum moniliferum* (fruit) | OST MON |
| *Trachyandra revoluta* | TRA REV | *Searsia glauca* (fruit) | SEA GLA |
| *Watsonia fourcadei* | WAT FOU | *Trachyandra revoluta* (veg.) | TRA REV |

Table S3.2 Species list summary of USOs (on left) and fruiting species (aboveground carbohydrate resources) (on right) and their acronyms encountered in the Phenology survey of the four basic vegetation types of the southern Cape lowlands to coastal margin.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species summary USOs** |  | **Species summary fruiting** |  |
| *Babiana patula* | BAB PAT | *Astephanus triflorus* (fruit) | AST TRI |
| *Chasmanthe aethiopica* | CHA AET | *Carissa bispinosa* (fruit) | CAR BIS |
| *Cyanella lutea* | CYA LUT | *Carpobrotus acinaciformis* (fruit) | CAR ACI |
| *Cyphia digitata* | CYP DIG | *Carpobrotus edulis* (fruit) | CAR EDU |
| *Ferraria crispa* | FER CRI | *Cassine tetragona* (fruit) | CAS TET |
| *Freesia alba* | FRE ALB | *Cynanchum obtusifolium* (fruit) | CYN OBT |
| *Freesia caryophyllacea* | FRE CAR | *Diospyros dichrophylla* (fruit) | DIO DIC |
| *Freesia leichtlinii* | FRE LEI | *Euclea racemosa* (fruit) | EUC RAC |
| *Gladiolus cunonius* | GLA CUN | *Microloma sagittatum* (fruit) | MIC SAG |
| *Gladiolus exilis* | GLA EXI | *Muraltia spinosa* (fruit) | MUR SPI |
| *Gladiolus floribundus* | GLA FLO | *Olea exasperata* (fruit) | OLE EXA |
| *Gladiolus guthriei* | GLA GUT | *Osteospermum moniliferum* (fruit) | OST MON |
| *Gladiolus rogersii* | GLA ROG | *Osyris compressa* (fruit, seed) | OSY COM |
| *Gladiolus virescens* | GLA VIR | *Schotia afra* (seed) | SCH AFR |
| *Hesperantha falcata* | HES FAL | *Searsia glauca* (fruit) | SEA GLA |
| *Ixia micrandra* | IXI MIC | *Searsia lucida* (fruit) | SEA LUC |
| *Moraea fugax* | MOR FUG | *Sideroxylon inerme* (fruit) | SID INE |
| *Oxalis pes-caprae* | OXA PES | *Tetragonia decumbens* (veg.) | TET DEC |
| *Pelargonium dipetalum* | PEL DIP | *Trachyandra ciliata* (veg.) | TRA CIL |
| *Pelargonium lobatum* | PEL LOB | *Trachyandra revoluta* (veg.) | TRA REV |
| *Pelargonium rapaceum* | PEL REP | *Zygophyllum morgsana* (seed) | ZYG MOR |
| *Pelargonium triste* | PEL TRI |  |  |
| *Rhoicissus digitata* | RHO DIG |  |  |
| *Romulea rosea* | ROM ROS |  |  |
| *Trachyandra ciliata* | TRA CIL |  |  |
| *Trachyandra revoluta* | TRA REV |  |  |
| *Tritonia crocata* | TRI CRO |  |  |
| *Tritonia squalida* | TRI SQU |  |  |
| *Watsonia aletroides* | WAT ALL |  |  |
| *Watsonia fergusoniae* | WAT FER |  |  |
| *Watsonia fourcadei* | WAT FOU |  |  |
| *Watsonia meriana* | WAT MER |  |  |









Fig. S1. Climate diagrams showing temperature and rainfall patterns for the study sites during the survey period (May 2010-April 2012). Mean values of temperature and rainfall are shown in parentheses.

**USOs**

|  |  |
| --- | --- |
|   | Dry leaves |
|   | Green leaves |
|   | Flowering |
|   | Not visible |

**Limestone Fynbos**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Babiana patula* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cyanella lutea* |   |   |   |   |   |   |   |   |   |   |   |   |
| Tecophilaeaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cyphia digitata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Campanulaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Ferraria crispa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Freesia alba* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus cunonius* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus exilis* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus floribundus* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus virescens* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Hesperantha falcata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Ixia micrandra* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Moraea fugax* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium dipetalum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium lobatum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium triste* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Romulea rosea* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra ciliata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra revoluta* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Tritonia squalida* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Watsonia fergusoniae* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Renosterveld**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Babiana patula* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cyphia digitata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Campanulaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Freesia caryophyllacea* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Freesia leichtlinii* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium lobatum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium rapaceum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Watsonia aletroides* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Watsonia meriana* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Sand fynbos**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus guthriei* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus rogersii* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium triste* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra revoluta* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Watsonia fourcadei* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Strandveld**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Babiana patula* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Chasmanthe aethiopica* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cyanella lutea* |   |   |   |   |   |   |   |   |   |   |   |   |
| Tecophilaeaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cyphia digitata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Campanulaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Ferraria crispa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Freesia alba* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Gladiolus floribundus* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Oxalis pes-caprae* |   |   |   |   |   |   |   |   |   |   |   |   |
| Oxalidaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium lobatum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Pelargonium triste* |   |   |   |   |   |   |   |   |   |   |   |   |
| Geraniaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Romulea rosea* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra ciliata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra revoluta* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Tritonia crocata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Iridaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Fruiting species**

|  |  |
| --- | --- |
|   | Green leaves  |
|   | Flowering |
|   | Ripe/edible fruit |
|   | Dry leaves |
|   | Not visible |

**Limestone Fynbos**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carissa bispinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Apocynaceae |   |   |   |   |   |   |   |   |   |   |   |   |
| *Cassine tetragona* |   |   |   |   |   |   |   |   |   |   |   |   |
| Celastraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Euclea racemosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Ebenaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Muraltia spinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Polygalaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Olea exasperata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Oleaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osteospernum moniliferum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asteraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osyris compressa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Santalaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Searsia glauca* |   |   |   |   |   |   |   |   |   |   |   |   |
| Anacardiaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Searsia lucida* |   |   |   |   |   |   |   |   |   |   |   |   |
| Anacardiaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Sideroxylon inerme* |   |   |   |   |   |   |   |   |   |   |   |   |
| Sapotaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Astephanus triflorus* |   |   |   |   |   |   |   |   |   |   |   |   |
| Apocynaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carpobrotus acinaciformis* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *C. edulis* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cynanchum obtusifolium* |   |   |   |   |   |   |   |   |   |   |   |   |
| Apocynaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Zygophyllum morgsana* |   |   |   |   |   |   |   |   |   |   |   |   |
| Zygophyllaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Tetragonia decumbens* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra ciliata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Renosterveld**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carissa bispinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Apocynaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Muraltia spinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Polygalaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osteospermum moniliferum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asteraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Searsia glauca* |   |   |   |   |   |   |   |   |   |   |   |   |
| Anacardiaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osyris compressa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Santalaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Sideroxylon inerme* |   |   |   |   |   |   |   |   |   |   |   |   |
| Sapotaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Diospyros dichrophylla* |   |   |   |   |   |   |   |   |   |   |   |   |
| Ebenaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Microloma saggitatum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asclepiadaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Sand Fynbos**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osteospernum moniliferum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asteraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Searsia glauca* |   |   |   |   |   |   |   |   |   |   |   |   |
| Anacardiaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carpobrotus edulis* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Diospyros dichrophylla* |   |   |   |   |   |   |   |   |   |   |   |   |
| Ebenaceae |   |   |   |   |   |   |   |   |   |   |   |   |

**Strandveld**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carissa bispinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Apocynaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Cassine tetragona* |   |   |   |   |   |   |   |   |   |   |   |   |
| Celastraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Muraltia spinosa* |   |   |   |   |   |   |   |   |   |   |   |   |
| Polygalaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Olea exasperata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Oleaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Osteospermum moniliferum* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asteraceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Schotia afra* |   |   |   |   |   |   |   |   |   |   |   |   |
| Fabaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Searsia glauca* |   |   |   |   |   |   |   |   |   |   |   |   |
| Anacardiaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Sideroxylon inerme* |   |   |   |   |   |   |   |   |   |   |   |   |
| Sapotaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Carpobrotus acinaciformis* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Zygophyllum morgsana* |   |   |   |   |   |   |   |   |   |   |   |   |
| Zygophyllaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Tetragonia decumbens* |   |   |   |   |   |   |   |   |   |   |   |   |
| Aizoaceae |   |   |   |   |   |   |   |   |   |   |   |   |
|  | J | F | M | A | M | J | J | A | S | O | N | D |
| *Trachyandra ciliata* |   |   |   |   |   |   |   |   |   |   |   |   |
| Asphodelaceae |   |   |   |   |   |   |   |   |   |   |   |   |

Fig. S2. Phenodiagrams of USOs and fruiting species (aboveground carbohydrate resources) encountered in the Phenology survey of the four primary vegetation types of the southern Cape lowlands to coastal margin.