

omnes vel fere obsoletis, spinigeris modo *Platyrrhaphiorum* regulariter dispositis (sed in quoque lobo non ultra 5). *Synflorescentia* spiciformis. *Phylla* involucri margine infra papillosa, supra interdum antrorse ciliato-scabrida, dorso glaberrima vel in subulâ tantum laxè subaraneoso-floccosa. *Flosculi* marginales haud fructiferi, pappo plumoso parum reducto ei florum centralium subsimili. *Pappi* setae saltem validiores in parte apicali circumcirca densiuscule plumulosae, barbellatae vel scabridae. Appendices *antherarum* totam per longitudinem aequaliter vittatae, vittâ prominulâ nectar secernente.

10. *Ptilostemon abylenis* (Maire) Greuter, comb. nova $\equiv$ *Cirsium Casabonae* subsp. *abylenis* Maire in Bull. Soc. Hist. Nat. Afrique N. 22: 299, 15.11.1931 $\equiv$ *Cirsium rhiphaeum* subsp. *abylenis* (Maire) Font Quer in Index Seminum Horti Bot. Mus. Barcinon. Sci. Nat. 1931: 15, 31.12.1931 $\equiv$ *Chamaepeuce abylenis* (Maire) Pau & Font Quer in Font Quer, sched. impr. Iter Marocc. a. 1930, n. 692 [apr. 1932, sec. Cavanillesia 5: 63, 1932] $\equiv$ *Lamyra abylenis* (Maire) Soják in Novit. Bot. Delect. Seminum Horti Bot. Univ. Carol. Prag. 1962: 47, 1962. **Syntypi**: "Massif calcaire du Mont aux Singes (Abyla) au dessus de Ceuta, 450-800 m: Djebel Moussa (Font-Quer, mai 1930); Djebel Fahies (Font-Quer et Maire, juin 1930)". **Lectotypus**: "*Cirsium Casabonae* (L.) D.C. ssp., In rupestribus calcareis Abylae, loco dicto Fahies, 350-500 m, flores vivide purpurei, die 28 junii", Maire, Iter maroccanum XX, 1930 (MPU).

Fig. 11a, p. 35 (phyllum involucri); fig. 16d, p. 45 (apices setarum pappi).

Folia rosularum magnopere coriacea, ambitu lanceolata, dissite sinuato-lobata, spinis spinulisque validis flavo-brunneis in quoque lobo 2-3(-5) lacinias late triangulares palmatim dispositas terminantibus; apice triangularia in spinam excurrentia, basi longe angustata imo vaginato-ampliata; eximie discoloria nam subtus candida tomento compacto crasso, supra ad nervos crispule floccoso-pubescentia caeterum glaberrima glaucovirentia; nervi spinigeri validi, utrinque sed subtus magis prominentes (nervi laterales inter lobos siti marginem non attingentes saepe observantur). *Caules* ineunte aestate evoluti, 40 cm et ultra alti, validi, tenuiter araneoso-cinerei ad costas saepe glabrescentes, infra dense supra sparsius foliati; folia caulina rosularibus subconformia sed breviora sessilia, media et superiora basi latâ rotundatâ semiamplexicaulia. *Synflorescentia* spiciformis, ad medium caulis attinens, capitulis 8-16 praeter terminale in axillis foliorum subsessilibus plerumque solitariis rarius binis aggregatis. *Involucrum* e basi rotundatâ vel truncatâ fere hemisphaericum, 16-20 mm longum, subaraneoso-floccosum. *Phylla* involucri regulariter imbricata, media quam interiora breviora; phyllorum exteriorum et mediorum pars basalis infra pallida inde purpurascens, margine interdum parce papillosa vel ciliolato-scabrida, lanceolata, ad 1.5-2 mm lata; appendix extus crispule subaraneosa, virens, plus minusve erecto-patula gracilis (basi minus quam 1 mm crassa) subulata triquetra spinosa recta, in phyllis mediis vix elongata, 4-7 mm longa; phylla interiora late linearia, basi straminea apice atropurpurea, margine dense antrorse ciliolato-scabrida caeterum glabra, recta, breviter acuminata. *Setae* receptaculi candidae, 9-10 mm longae. *Flosculi* atropurpurei. *Pappus*

12-15 mm longus, setis 2-3-fariis (in flosculis marginalibus 1-2-fariis) breviter (ad c. 1.5 mm) plumosis, apice circumcirca densius laxiusve barbellatis. *Corolla* 17-19 mm longa; tubus 8-10 mm longus; limbus 9-10 mm longus, basi paulo amplius inde tubulosus, per c. $\frac{2}{5}$ longitudinis inaequaliter 5-fidus (differentiâ fissurarum 0.5-0.8 mm), laciniis basi 0.7-0.9 mm latis. *Staminum* filamenta post anthesin 4.5-5.5 mm longa, a medio vel paulo infra laxiuscule mediocriter pilosa; tubus antherarum per 1.4-2.2 mm e corollâ exsertus, 8.5-9.5 mm longus, 0.8-1 mm crassus, caudis 2.4-2.8 mm longis, appendicibus 1.8-2.2 mm longis obtusiusculis vel breviter apiculatis. *Apex styli* 1.6-1.9 mm longus; lobi stigmatiferi lineari-spatulati apice rotundati, per 0.3-0.4 mm liberi vix hiantes, lateraliter saepe usque ad medium apicem decurrentes. *Fructus* oblique obovoideus, 4.8-5.5 mm longus, 3-3.8 mm crassus, atropurpurascens plus minusve brunneo-marmoratus; discus apicalis diametro 1.4-1.6 mm, margine minimo sed distincto.

Habitat in clivis lapidosis, in rarioribus dumetorum sempervirentium, solo calcaro, inter 300 et 800 m supra maris aequor. Floret mensibus Junio et Julio.

Area

Endemicus in montosis Abylae prope urbem Ceuta Regni marocani septentrionalis. Vide fig. 35.

Specimina visa

Regnum marocanum: in dit. urbis Ceuta, m. Jebel Moussa (= Abyla), 28.6.1930, *Font Quer* 692 (BM, G, LAU, MPU, Z); ibid., in m. Jebel el Fahies, 28.6.1930, *Maire* (MPU); ibid., secus bivium pagi Beni Younnech, 11.7.1971, *Dittrich* 1262 (G, Gr).

11. *Ptilostemon rhiphaeus* (Pau & Font Quer) Greuter, comb. nova $\equiv$ *Chamaepeuce rhiphaea* Pau & Font Quer in *Font Quer*, sched. impr. *Iter Marocc.* a. 1927, n. 690 [10.3.1928, sec. *Cavanillesia* 1: 47. 1928] $\equiv$ *Cirsium Casabonae* var. *rhiphaeum* (Pau & Font Quer) Font Quer in *Cavanillesia* 1: 79. 10.4.1928 $\equiv$ *Cirsium Casabonae* subsp. *rhiphaeum* (Pau & Font Quer) Maire in *Bull. Soc. Hist. Nat. Afrique N.* 20: 187. 1929 $\equiv$ *Cirsium rhiphaeum* (Pau & Font Quer) Font Quer in *Index Seminum Horti Bot. Mus. Barcinon. Sci. Nat.* 1930: 15. 1930 $\equiv$ *Cirsium Casabonae* var. *eu-rifeum* Maire in *Bull. Soc. Hist. Nat. Afrique N.* 22: 299. 1931, nom. illeg. $\equiv$ *Lamyra rhiphaea* ["*rhiphaea*"] (Pau & Font Quer) Soják in *Novit. Bot. Delect. Seminum Horti Bot. Univ. Carol. Prag.* 1962: 47. 1962. **Typus:** "*Chamaepeuce rhiphaea* Pau et F. Q., sp. nov., Hab. in quercetis c. Bu-Meziat (Atlante rhiphaeo), 1700 m. alt. solo siliceo, 29. junii", *Font Quer*, *Iter maroccanum* 1927, n. 690. **Lectotypus:** idem (G; isotypi: BM, LAU, MPU).

- *Cirsium Casabonae* vel *Chamaepeuce Casabonae* auct. quoad pl. Kabyliae et Atlantis rifani (non *Carduus Casabonae* L.).
- *Cirsium Casabonae* subsp. *trispinosum* sensu Maire quoad pl. Africae (non s.str.).
- *Chamaepeuce sidi-guinii* ["Sidi-Guini"] sensu Sennen in sched. impr. Pl. Espagne n. 9429, c. 1935 (non *Cirsium sidi-guinii* Pau & Font Quer).

Fig. 2b, p. 17 (structura schematica plantae); fig. 7e, p. 28 (lobus folii); fig. 11b, p. 35, et 12a, p. 36 (phylla involucri); fig. 16d, p. 45 (apices setarum pappi); tab. II a-b (grana pollinis).

Folia rosularum ambitu anguste lanceolata, dissite sinuato-lobata, spinis spinulisque validis flavo-brunneis in quoque lobo 2-3(-5) lacinias late triangulares palmatim dispositas terminantibus; apice triangularia in spinam excurrentia, basi longe angustata imo vaginato-ampliata; eximie discoloria nam subtus candida tomento compacto crasso, supra ad nervos crispule floccoso-pubescentia caeterum glaberrima viridia vel glaucescentia; nervi spinigeri validi utrinque sed subtus magis prominentes (nervi laterales inter lobos siti marginem non attingentes saepe observantur). *Caules* ineunte aestate evoluti, (30-)50-70 cm (et ultra?) alti, validiusculi, tenuiter araneoso-cinerei ad costas saepe glabrescentes, sparsius densiusve foliati; folia caulina rosularibus subconformia sed sessilia, inferiora interdum oblique inserta brevissime subdecurrentia, media et superiora aliquanto diminuta basi latâ saepe rotundatâ horizontaliter inserta. *Synflorescentia* spiciformis vel racemosa ad tertiam partem superiorem, rarius ad medium caulis attinens; capitula (2-)5-10(-15), praeter terminale in axillis foliorum plerumque solitaria rarius bina, subsessilia vel breviter (raro nonnulla usque ad 5 cm) pedunculata. *Involucrum* e basi rotundatâ vel truncatâ anguste vel late campanulatum, 15-25 mm longum, glabrum. *Phylla* involucri praeter papillas marginales glabra, media interiora aequantia vel saepius superantia; phyllorum exteriorum et mediorum pars basalis pallide virens, marginem et apicem versus saepe purpurea, ovato-lanceolata, ad 2.5-3.5 (-4) mm lata; appendix virens saepe purpureo-suffusa, patula vel erecto-patula subulata triquetra spinosa recta, in phyllis mediis validiuscula (basi ultra 1 mm crassa) evidenter elongata, 12-16(-22) mm longa; phylla interiora linearia, straminea apice saepe atropurpurea, margine papillosa antice interdum parce scabrida, recta, apice spinuloso-acuminata. *Setae* receptaculi candidae, 9-13 mm longae. *Flosculi* laete purpurei vel rosei interdum albidii. *Pappus* 15-19(-20) mm longus, setis 2-3-fariis mediocriter (ad 1.5-2 mm) plumosis, apice circumcirca densius laxiusve plumulosis vel barbellatis (in flosculis marginalibus setae 1-2-fariae, breviter plumosae, apice circumcirca vel subbifariam laxè scabridae). *Corolla* 17-25 mm longa; tubus 7-11(-12) mm longus; limbus 10-13(-14) mm longus, basi ampliatus inde tubulosus, per tertiam partem vel per $\frac{3}{8}$ longitudinis inaequaliter 5-fidus (differentiâ fissurarum 0.2-1.2 mm), laciniiis basi 0.6-0.9 mm latis. *Staminum* filamenta post anthesin 5.8-6.6 mm longa, a medio vel paulo supra infravase dense vel laxius mediocriter pilosa; tubus antherarum per 1-2.2 mm e corollâ exsertus, 9.5-13.5 mm longus, 0.9-1.1 mm crassus, caudis 1.6-3.5 mm longis, appendicibus 2.2-3 mm longis indistincte apiculatis. Apex *styli* 1.8-2.8 mm longus; lobi stigmatiferi lineares vel lineari-spatulati apice rotundati, per 0.3-0.6 mm liberi vix vel paulo hiantes, lateraliter vix vel valde (interdum per 1 mm) decurrentes. *Fructus* oblique obovoideus, 3.8-4.5 mm longus, 3-3.5 mm crassus, brunneus vel atropurpurascens,