

acutissima, costa mediana tenuiter prominente; exteriora lanceolata, interioribus appressa tertiam vel quartam partem longitudinis interiorum attingentia; interiora (5—)7(—9), prope basin 4—5 mm lata, apicem acutissimum versus sensim attenuata, inaequilonga. Ligulae pallide flavidae vel pallide carneaе, involuorum circiter aequantes. Achaenia 12—14 mm longa, linearia, apice truncata, tota longitudine sulcato-costata, alis tribus laterali-dorsalibus in alas eburneas suberosas achaenii diametrum aequantes vel superantes expansis, costis ventralibus tribus angustis, inter costas rigidule atrato-spinulosa; pappus achaenio longior, primum flavescens, deinde carneo-brunnescens, inaequiradius, radiis inferne longe plumosis, superne scabris.

A f g h a n i s t a n : SE: Kandahar: In collibus saxosis 44 km NE Qala Bist, 900 m, RECH. 34722! 60 km W Kandahar versus Kushk-i Nakhud, in arenosis, 900 m, FREITAG 488! Sir Chahan S Qala-i Jadid (Spin Boldak), 1200 m, FREITAG 4633! — E: Kabul: Sarobi, VOLK s.n.! Inter Sarobi et Darunta, in saxosis granit., VOLK 1972! Darunta, 600 m, PODLECH 17433! In declivibus occidentalibus jugi Lataband, 1800 m, RECH. 31080! Laghman: Alishang-Oluswali, 1150 m, PODLECH 17506!, 17649! 2 km S Rayn, 1030 m, PODLECH 17594! Nangarhar: Darrah-i Nur prope Badyalay, 675 m, PODLECH 17422! 5 km N Jalalabad, 650 m, FREITAG 4721!, 4722! Tang-i Jamai W Jalalabad, 800 m, FREITAG 4722! Khost: Ad occidentem oppidi, 1200 m, ANDERS 8990!

P a k i s t a n : Swat: Barikot, R. R. STEWART. — Peshawar: Peshawar, DEANE. — Kohat: Kohat, DRUMMOND 835. — Quetta: Fort Sandeman, coll. ign. herb. DD 20575 p.p.! 26 km N Fort Sandeman versus Wana, ad versuras arenoso-argillosas, 1500 m, RECH. 29836! — SE Chahar Sar, CROOKSHANK 127. Bandagan Nala, CROOKSHANK 101.

Distr. gen.: Endem.

7. *Tragopogon*

Tragopogon L., Spec. Plant. 789 (1753); Gen. Plant. ed. 5: 346 (1754).

Lit.: S. A. NIKITIN, Novije vidy roda *Tragopogon* L. srednij Asii, Acta Instituti Botanici Academiae Scientiarum URSS. Ser. 1, fasc. 1: 191—201 (1933). S. A. NIKITIN, Generis *Tragopogon* species novae, Notulae Systematicae ex Herbario Instituti Botanici Academiae Scientiarum URSS. Leningrad 7: 257—274 (1937). SCH. I. KUTHATHELADZE, Generis *Tragopogonis* e grege *Flaviflora* BOISS. species novae, Notulae Systematicae ac geographiae Instituti Botanici Tphilisiensis, fasc. 16: 97—101 (1951). SCH. I. KUTHATHELADZE, Generis *Tragopogonis* species caucasicae novae, l.c. 17: 28—47 (1953). A. G. BORISSOVA, *Tragopogon* in Flora Turkmenia 7: 291—299 (1960). SCH. I. KUTHATHELADZE, *Tragopogon* in Flora Azerbaidzhana 8: 499—512 (1961). A. I. VVEDENSKIJ (ed.) *Tragopogon* in Flora Uzbekistanica 6: 428—434 (1962). S. J. LIPSCHITZ, *Tragopogon* in Flora URSS. 29: 115—196 (1964).

Herbae biennes vel perennes, rarius annuae vel suffrutescentes. Folia integerrima, parallelinervia, saepius linearia vel \pm anguste lanceolata, caulina basi saepe amplexicauli sessilia. Involuorum uniseriatum oligophyllum, phyllis basi connatis. Receptaculum nudum. Ligulae aut flavae concolores vel dorso purpureo-suffusi vel -striati aut violacei vel purpurei. Achaenia in rostrum saepius longum distinctum, rarius breve indistinctum attenuata; pappus setis saepe inaequalibus \pm intertexte plumosis apicem versus saepe scabridis compositus.

Die vorliegende Bearbeitung folgt weitgehend derjenigen von BORISSOVA in Fl. URSS. 29 (1964). Sie hat unvermeidlicherweise einen provisorischen Charakter. Trotz umfassender eigener Aufsammlungen in fast allen Teilen des Flora Iranica-Gebietes, und trotz ausgiebiger Berück-

34. *T. leucanthus* RECH. f., sp. nov.

Typus: HEWER 1297, G!

Perennis, pluricaulis, floccosus, mox glabrescens, indumento gossypino-floccoso congesto, collo parce squamato. Caules tenues, erecti, in sicco tenuiter striati, plerumque profunde plurifurcati, rarius subsimplices, tota longitudine remote foliati. Folia e basi semiamplexicauli \pm 5 mm lata sensim attenuata, anguste lineari-lanceolata, plerumque quinquenervia, tenuiter \pm indistincte scarioso-marginata, in statu florifero capitula aequantia. Pedunculi fructiferi apice non incrassati. Involucrum plerumque 5(-7)-phyllum, floriferum 20-25 mm, fructiferum usque ad 35 mm et verisimiliter ultra elongatum; phylla e basi 4-5 mm lata sensim attenuata, in sicco tenuiter multistriata, costa mediana tenui pallida. Ligulae in vivo lacteae (fide collectore), in sicco flavescens, marginales involucri tertia circiter parte longiores. Achaenia (immatura) cum rostro c. 15 mm longa, subventricosa, cum basi rostri dense muriculata, in rostrum tenue achaenio circiter aequilongum apice abrupte annulato-incrassatum subabrupte attenuata; pappus fuscescens, usque ultra 20 mm longus.

A f g h a n i s t a n : NW: Herat: In declivibus austro-occidentalibus jugi Sabzzak, 2200 m, AMIN in FREITAG 6139! - C: Ghorat: 24 km W Lal versus Qala Qansi (Chakcharan), substr. calc., 2950 m, 18. VI. 1969, HEWER 1297!

Distr. gen.: Endem.

Charakterisiert durch vielstengeligen Wuchs, dünne, tiefgabelige, locker beblätterte Stengel, flockig zusammengeballtes Indument, große, im Leben weiße Blüten, lang und fein geschnäbelte Achänen.

35. *T. porphyrocephalus* RECH. f., sp. nov.

Icon.: Tab. 79.

Typus: JACOBS 6651, W!

Verisimiliter perennis; collum residuis petiolorum parce fibroso-dissolutis tunicatum, collo interdum caules serius florentes 1-2-proferens. Tota planta omnino glaberrima vel in axillis foliorum parce floccosa, in vivo glaucescens. Caulis 20-30 cm altus, tenuis, simplex, stricte erectus, in dimidio inferiore foliatus. Folia e basi vix dilatata linearia, graminea, 3-6 mm lata, apicem acutissimum versus sensim longe attenuata, stricta, cauli saepe \pm appressa, (3-)5-nervia, margine minutissime cartilagineo-denticulata; inferiora imprimis costa mediana dilatata albida. Pedunculus elongatus, 10-12 cm longus, strictus, tenuis, fructifer non vel vix sensibilibiter incrassatus. Involucrum plerumque 8-phyllum, floriferum 25-35 mm, fructiferum usque ad 45 mm longum, in sicco olivaceo-brunneum; phylla basi 3,5-6,5 mm lata, apicem valde acutum versus sensim longissime attenuata. Ligulae in vivo purpureae, involucri quarta vel tertia parte longiores, in sicco paulo expallescens. Antherarum tubus atropurpureus. Achaenia marginalia cum rostro 30 mm longa, costata, tota longitudine valide squamoso-muriculata, in rostrum distinctum achaenio vix brevius pallidum sublaeve apice non incrassatum sed lanulosum attenuata; achaenia centralia minus manifeste muriculata; pappus achaenio longior 35 mm attingens, intense purpureo-violascens, radiis plumosis, apicem versus scabridis.

Persia: W: Azerb.: Ad litus austro-occidentale lacus Rezaiyeh 36°56'N, 45°52'E = inter