

# Myxomycetes (Myxogastria) of Türkiye: A checklist 2023

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## Abstract

In this study, 309 myxomycete species reported so far in Türkiye are listed. Previously, in the checklist published in 2019, 286 species were reported. With the addition of new records and the removal of synonyms, the number of species have reached to 309 today. These species belong to 5 orders, 12 families and 45 genera. Physarida and *Physarum* are the largest order and genus, respectively, containing the highest number of species. Türkiye is not poor in terms of myxobiota. However, studies on Myxomycetes in this country are still insufficient.

**Keywords:** Checklist, Diversity, Myxomycetes, Türkiye.

## Introduction

Türkiye has an important biogeographic feature as it is located at the junction of Asia and Europe. There are Euro-Siberian, Mediterranean and Irano-Turanian phytogeographic regions. It shows a lot of biodiversity due to its location, seasonal characteristics and geographical features (Sevindik *et al.*, 2022; Sesli *et al.*, 2020).

Myxomycetes are known as plasmodial slime molds. Members of Myxogastrea (Amoebozoa) are unicellular organisms with coenocytic phagotrophic phases. It is a group of amoebic eukaryotes that spreads on other microorganisms in terrestrial ecosystems. Especially the presence of temperature, humidity, pH and organic material is very effective in their development (Baba and Sevindik, 2018; Sevindik *et al.*, 2018; Baba and Sevindik, 2019; Sevindik and Akgül, 2019).

Myxomycetes Stemonitida is represented by five orders as Liceida, Trichiida, Echinosteliida and Physarida. It was previously known as Ceratiomyxales ordo. But today it is classified in the Protostelia class. (Spiegel *et al.*, 2004). As of 2023, 1088 myxomycet species have been identified in the world. These species belong to 15 families and 70 genera (Lado, 2023). The classification, which started with the identification of *Lycogala epidendrum* (L.) Fr in 1654, continues rapidly today (Martin and Alexopoulos, 1969). In Türkiye, the first record was reported by Lohwag (1957). As of 2023, myxomycetes are represented by 12 families, 45 genera and 309 species in Türkiye.

## List of myxomycetes (Myxogastria)

Domain: Eukaryota  
Kingdom: Protista  
Phylum: Mycetozoa  
Classis: Myxomycetes

## Order: Echinosteliida

### Family: Clastodermataceae

1. *Clastoderma debaryanum* A. Blytt (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Baba *et al.*, 2013; Eroğlu and Kaşık, 2013a; Baba and Doğan, 2018; Baba *et al.*, 2018).

2. *C. pachypus* Nann.-Bremek. (Ergül and Dülger, 2000a; Oran *et al.*, 2006).

### Echinosteliaceae

3. *Echinostelium apitectum* K.D. Whitney (Ergül *et al.*, 2005b).

4. *E. arboreum* H.W. Keller and T.E. Brooks (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b).

5. *E. coelocephalum* T.E. Brooks and H.W. Keller (Ergül and Dülger, 2000a).

6. *E. colliculosum* K.D. Whitney and H.W. Keller (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a).

7. *E. corynophorum* K.D. Whitney (Ergül and Dülger, 2000a).

8. *E. cribrarioides* Alexop. (Ergül and Dülger, 2000a).

9. *E. elachiston* Alexop. (Härkönen, 1988; Ergül and Dülger, 2000a).

10. *E. fragile* Nann.-Bremek. (Ergül and Dülger, 2000a).

11. *E. ladoi* Pando (Oran and Ergül, 2004).

12. *E. minutum* de Bary (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 1998, 2000d; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2016, 2018, 2019, 2020, 2021a,b; Baba, 2015, 2017; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Touray and

Ergül, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020, 2022a; Baysal and Eroğlu, 2022).

## Order: Liceida

### Family: Cribrariaceae

**13. *Cribraria argillacea*** (Pers. ex J.F. Gmel.) Pers. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a; Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015; Baba *et al.*, 2016; Baba *et al.*, 2018).

**14. *C. aurantiaca*** Schrad. (Ergül and Dülger, 2000a; Ergül *et al.*, 2005a; Oran *et al.*, 2006; Yağız and Afyon, 2005, 2006a; Baba *et al.*, 2016).

**15. *C. cancellata*** (Batsch) Nann.-Bremek. (Ergül and Gücin, 1993; Ergül and Dülger, 1998; Ergül and Dülger, 2000a; Yağız *et al.*, 2002; Ocak and Hasenekoğlu, 2003a, 2005; Yağız and Afyon, 2006a; Ergül *et al.*, 2005a, 2005b; Demirel *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015, Oskay and Tüzün, 2015; Baba *et al.*, 2016; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba *et al.*, 2018; Baba *et al.*, 2019; Zümre *et al.*, 2019; Baba *et al.*, 2020; Baysal and Eroğlu, 2022).

**16. *C. confusa*** Nann.-Bremek. and Y. Yamam. (Ergül *et al.*, 2005b).

**17. *C. costata*** Dhillon and Nann.-Bremek. (Baba *et al.*, 2016).

**18. *C. elegans*** Berk. and M.A. Curtis (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Baba *et al.*, 2013; Baba *et al.*, 2018).

**19. *C. intricata*** Schrad. (Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015; Baba *et al.*, 2016; Baba and Arslan, 2017b; Baba *et al.*, 2019; Zümre *et al.*, 2019).

**20. *C. languescens*** Rex (Yağız and Afyon, 2006a, 2006c, 2007a; Baba and Tamer, 2008a; Baba and Arslan, 2017b).

**21. *C. lepida*** Meyl. (Eroğlu, 2021; Baba and Sevindik, 2022a).

**22. *C. macrocarpa*** Schrad. (Ocak and Hasenekoğlu, 2005; Baba *et al.*, 2013b; Zümre *et al.*, 2019).

**23. *C. microcarpa*** (Schrad.) Pers. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Baba *et al.*, 2013; Baba *et al.*, 2016; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba *et al.*, 2018; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).

**24. *C. minutissima*** Schwein. (Ergül and Dülger, 2000a; Baba *et al.*, 2013; Baba and Arslan, 2017b; Zümre *et al.*, 2019).

**25. *C. mirabilis*** (Rostaf.) Masee (Yağız and Afyon, 2007b; Demirel *et al.*, 2010; Ocak, 2015).

**26. *C. oregana*** H.C. Gilbert (Eroğlu and Kaşık, 2013b).

**27. *C. piriformis*** Schrad. (Yağız and Afyon, 2007b; Baba and Tamer, 2008a; Demirel *et al.*, 2010; Baba *et al.*, 2013; Baba *et al.*, 2016; Baba and Arslan,

2017b; Zümre *et al.*, 2019).

**28. *C. purpurea*** Schrad. (Baba, 2015).

**29. *C. spinispora*** Lado & D. Wrigley (Baba, 2021)

**30. *C. tenella*** Schrad. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a).

**31. *C. violacea*** Rex (Härkönen and Uotila, 1983; Ergül and Dülger, 1998, 2000d; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba *et al.*, 2013, 2016, 2018, 2020; Eroğlu and Kaşık, 2013a; Baba, 2015, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baysal and Eroğlu, 2022).

**32. *C. vulgaris*** Schrad. (Oran and Ergül, 2004; Demirel *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba, 2012; Baba *et al.*, 2013, 2015; Oskay and Tüzün, 2015; Baba *et al.*, 2016; Baba and Arslan, 2017b; Baba and Doğan, 2018; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).

**33. *Lindbladia tubulina*** Fr. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Baba and Arslan, 2017b; Baba *et al.*, 2020).

**34. *Dictydiaethalium plumbeum*** (Schumach.) Rostaf. (Baba *et al.*, 2008, 2013; Baba, 2012; Baba, 2015; Baba *et al.*, 2018; Baba *et al.*, 2019; Baba *et al.*, 2021a; Baba and Sevindik, 2022a).

### Family: Liceaceae

**35. *Licea belmontiana*** Nann.-Bremek. (Oran and Ergül, 2004; Ergül *et al.*, 2005b; Yağız and Afyon, 2006a).

**36. *L. biforis*** Morgan (Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2006a; Baba, 2012; Baba *et al.*, 2013; Baba, 2015; Baba and Zümre, 2015; Baba *et al.*, 2016; Baba, 2017; Ocak and Konuk, 2018; Baba *et al.*, 2018).

**37. *L. castanea*** G. Lister (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013; Baba, 2015; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba *et al.*, 2016; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba *et al.*, 2018; Baba *et al.*, 2019; Zümre *et al.*, 2019; Baba *et al.*, 2020; Baba and Sevindik, 2022a).

**38. *L. denudescens*** H.W. Keller and T.E. Brooks (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Baysal and Eroğlu, 2022).

**39. *L. inconspicua*** T.E. Brooks and H.W. Keller (Oran and Ergül, 2004; Ergül *et al.*, 2005b).

**40. *L. kleistobolus*** G.W. Martin (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2016, 2019, 2018, 2020, 2021b; Baba, 2015; Oskay and Tüzün, 2015; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

41. *L. marginata* Nann.-Bremek. (Yağız and Afyon, 2007b; Demirel *et al.*, 2010).
42. *L. minima* Fr. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2016, 2018, 2019, 2020; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre *et al.*, 2019;).
43. *L. operculata* (Wingate) G.W. Martin (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Yağız and Afyon, 2006a).
44. *L. parasitica* (Zukal) G.W. Martin (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Eroğlu and Kaşık, 2013a; Yavuz, 2019).
45. *L. pedicellata* (H.C. Gilbert) H.C. Gilbert (Ergül and Dülger, 2000a; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013; Baba *et al.*, 2018; Baba *et al.*, 2019).
46. *L. perexigua* T.E. Brooks and H.W. Keller (Oran and Ergül, 2004).
47. *L. pescadorensis* Chao H. Chung and C.H. Liu (Baba and Arslan, 2017; Baba and Atay, 2019; Baba and Sevindik, 2020; Baba *et al.*, 2021a; Baba *et al.*, 2021b).
48. *L. punctiformis* G.W. Martin (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Oran *et al.*, 2006).
49. *L. pusilla* Schrad. (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Demirel *et al.*, 2006; Baba, 2012; Eroğlu and Kaşık, 2013a).
50. *L. pygmaea* (Meyl.) Ing (Ergül and Dülger, 1998, 2000d).
51. *L. rugosa* Nann.-Bremek. & Y. Yamam. (Baba and Sevindik, 2022a).
52. *L. scyphoides* T.E. Brooks and H.W. Keller (Ergül *et al.*, 2005b; Baba *et al.*, 2021b).
53. *L. synsporos* Nann.-Bremek. (Ocak and Hasenekoğlu, 2003b; Ocak and Konuk, 2018).
54. *L. tenera* E. Jahn (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Baba *et al.*, 2013; Baba, 2015; Ocak and Konuk, 2018).
55. *L. testudinacea* Nann.-Bremek. (Eroğlu *et al.*, 2015).
56. *L. tuberculata* G.W. Martin (Ocak and Hasenekoğlu, 2003a).
57. *L. variabilis* Schrad. (Ocak and Hasenekoğlu, 2003b; Baba and Tamer, 2008a; Baba, 2012a; Ocak and Konuk, 2018).

#### Family: Reticulariaceae

58. *Lycogala epidendrum* (L.) Fr. (Lohwag 1957, 1964; Selik, 1964; Härkönen, 1988; Gücin *et al.*, 1996b; Ergül and Dülger, 1998, 2000d; Kaya and Demirel, 1998, Pekşen and Karaca, 2000, 2003; Türkel 2003; Demirel *et al.*, 2004; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Baba and Tamer, 2008a; Ergül

and Akgül, 2011; Baba *et al.*, 2013, 2015, 2016, 2018, 2019; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).

59. *L. exiguum* Morgan (Oran and Ergül, 2004; Ocak and Hasenekoğlu, 2005; Ergül and Akgül, 2011; Eroğlu and Kaşık, 2013a).

60. *L. flavofuscum* (Ehrenb.) Rostaf. (Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b).

61. *Reticularia intermedia* Nann.-Bremek. (Baba and Özyiğit 2017).

62. *R. jurana* Meyl. (Ergül *et al.*, 2005b; Eroğlu and Kaşık, 2013a).

63. *R. liceoides* (Lister) Nann.-Bremek. (Ergül and Oran 2005).

64. *R. lycoperdon* Bull. (Demirel and Uzun, 2002; Kaya and Demirel, 1998; Baba *et al.*, 2013, 2015; Eroğlu and Kaşık, 2013a; Baba, 2015; Ocak, 2015; Zümre *et al.*, 2019; Baba *et al.*, 2021b).

65. *R. splendens* Morgan (Ergül, 1995; Gücin *et al.*, 1996b; Ergül and Dülger, 2000a; Gücin and Dülger, 2007; Ergül and Akgül, 2011; Baba and Sevindik, 2020).

66. *Tubifera ferruginosa* (Batsch) J.F. Gmel. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2006a; Ergül and Akgül, 2011; Baba *et al.*, 2016, 2020).

#### Order: Trichiida

##### Family: Arcyriaceae

67. *Arcyria affinis* Rostaf. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a; Yağız and Afyon, 2006a; Baba *et al.*, 2013, 2015; Baba and Doğan, 2018; Zümre *et al.*, 2019).

68. *A. annulifera* G. Lister and Torrend (Oran and Ergül, 2004; Ocak, 2015; Oskay and Tüzün, 2015).

69. *A. cerradensis* Agra, L.H. Cavalc. & Dianese (Baba, 2021)

70. *A. cinerea* (Bull.) Pers. (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005a, 2005b; Demirel *et al.*, 2006; Dülger *et al.*, 2006; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, 2021b; Eroğlu and Kaşık, 2013a; Eroğlu *et al.*, 2014; Baba and Zümre, 2015, Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Touray and Ergül, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).

71. *A. congesta* (Sommerf.) Berk. & Broome (Yağız and Afyon, 2006a, 2006c, 2007a; Eroğlu and Kaşık, 2013a; Yıldız and Dülger 2015; Baysal and Eroğlu, 2022).

72. *A. denudata* (L.) Wettst. (Härkönen, 1988; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b; Ocak

and Hasenekoğlu, 2005; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015, 2016, 2018, 2021a; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015; Baba and Arslan, 2017b; Zümre *et al.*, 2019; Eroğlu *et al.*, 2021).

**73. *A. ferruginea*** Saut. (Ergül and Dülger, 2002c; Oran *et al.*, 2006; Baba *et al.*, 2013; Ocak, 2015; Oskay and Tüzün, 2015; Zümre *et al.*, 2019).

**74. *A. globosa*** Schwein. (Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005, 2006a; Demirel *et al.*, 2006; Baba and Tamer, 2008a; Eroğlu and Kaşık, 2013a; Oskay and Tüzün, 2015; Baba *et al.*, 2018, 2019, 2020; Baba and Sevindik, 2020).

**75. *A. imperialis*** (G. Lister) Q. Wang and Yu Li (Oran and Ergül, 2004; Yağız and Afyon, 2007b).

**76. *A. incarnata*** (Pers. ex J.F. Gmel.) Pers. (Ergül and Dülger, 2000a; Yağız *et al.*, 2002; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005, 2006a, 2006c; Demirel *et al.*, 2006; Dülger *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020a; Eroğlu and Kaşık, 2013a; Eroğlu *et al.*, 2014; Baba and Zümre, 2015; , Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; , , Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**77. *A. insignis*** Kalchbr. and Cooke (Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Oskay and Tüzün, 2015; Baba *et al.*, 2016; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**78. *A. magna*** Rex (Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006).

**79. *A. major*** (G. Lister) Ing (Yağız and Afyon, 2005).

**80. *A. minuta*** Buchet (Ergül and Dülger, 2000b, 2000d, 2002c; Oran *et al.*, 2006; Baba, 2012; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, 2021a; Ocak, 2015; Baba and Doğan, 2018; Baba and Atay, 2019).

**81. *A. nigella*** Emoto (Ocak and Hasenekoğlu, 2005; Oskay and Tüzün, 2015).

**82. *A. obvelata*** (Oeder) Onsberg (Ergül and Dülger, 1998, 2000d; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2005, 2006a, 2007b; Demirel *et al.*, 2006; Dülger *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018, 2020; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba and Arslan, 2017b; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a).

**83. *A. occidentalis*** (T. Macbr.) G. Lister (Dülger *et al.*, 2005).

**84. *A. oerstedii*** Rostaf. (Dülger *et al.*, 2006; Yağız and Afyon, 2006a, 2006c).

**85. *A. pomiformis*** (Leers) Rostaf. (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005a; Demirel *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).

**86. *A. stipata*** (Schwein.) Lister (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a; Demirel *et al.*, 2006; Baba *et al.*, 2013; Zümre *et al.*, 2019).

**87. *A. versicolor*** W. Phillips (Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Oran *et al.*, 2006; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015; Zümre *et al.*, 2019).

**88. *Gulielmina vermicularis*** (Schwein.) García-Cunch., J.C.Zamora & Lado. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2018, 2019, 2021a, 2021b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).

**89. *Ophiotheca chrysosperma*** Curr. (Ergül and Dülger, 1998, 2000d; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005, 2006a; Oran *et al.*, 2006; Baba and Tamer, 2008a; Eroğlu and Kaşık, 2013a; Baba, 2015; Ocak and Konuk, 2018; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).

**90. *O. pedata*** (Lister & G.Lister) García-Cunch., J.C.Zamora & Lado. (Baba, 2015; Ocak and Konuk, 2018; Baba *et al.*, 2021b).

**91. *Perichaena corticalis*** (Batsch) Rostaf. (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2016, 2018, 2021a; Eroğlu and Kaşık, 2013a; Baba, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**92. *P. depressa*** Lib. (Yağız and Afyon, 2007b; Demirel *et al.*, 2010; Baba, 2012; Baba *et al.*, 2013, 2015, 2018, 2021a; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Zümre, 2015; Baba and Doğan, 2018; Baba and Atay, 2019; Baba and Sevindik, 2020; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).

**93. *P. quadrata*** T. Macbr (Baba, 2021; Baysal and Eroğlu, 2022).

**94. *P. tessellata*** G. Lister (Oran and Ergül, 2004; Ergül *et al.*, 2005b).

Dianemataceae

- 95. *Calomyxa metallica*** (Berk.) Nieuwl. (Ergül and Dülger, 2000a; Oran *et al.*, 2006; Baba and Sevindik, 2022a).
- 96. *Dianema corticatum*** Lister (Ocak and Hasenekoğlu, 2005).
- 97. *D. harveyi*** Rex (Ergül *et al.*, 2005b).
- 98. *D. repens*** G. Lister and Cran (Ergül and Dülger, 2002c; Ergül and Akgül, 2011).  
Trichiaceae
- 99. *Hemitrichia abietina*** (Wigand) G. Lister (Baba and Tamer, 2008b; Baba *et al.*, 2013; Zümre *et al.*, 2019).
- 100. *H. aurea*** Nann. Bremek & H. Neubert (Baba *et al.*, 2021c).
- 101. *H. calyculata*** (Speg.) M.L. Farr (Ergül and Dülger, 2000a, 2002a; Ergül *et al.*, 2005a, 2005b; Oran *et al.*, 2006; Yağız and Afyon, 2007b; Baba and Arslan, 2017b).
- 102. *H. clavata*** (Pers.) Rostaf. (Härkönen, 1988; Ergül and Dülger, 2000a; Yağız and Afyon, 2007b; Baba *et al.*, 2013; Baba *et al.*, 2018).
- 103. *H. decipiens*** (Pers.) García-Cunch., J.C. Zamora & Lado. (Härkönen, 1988; Ergül and Dülger, 2000a; Yağız *et al.*, 2002; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2005, 2006a, 2007b; Demirel *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2015, 2016, 2018, 2020; Ocak, 2015; Oskay and Tüzün, 2015; Baba *et al.*, 2016; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba *et al.*, 2018; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 104. *H. leiocarpa*** (Cooke) Lister (Oran and Ergül, 2004; Yağız and Afyon, 2007b).
- 105. *H. lutescens*** (Lister) García-Cunch., J.C.Zamora & Lado. (Gücin and Öner 1986; Ergül and Dülger, 2000a; Demirel *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2021a; Baba and Zümre, 2015; Baba and Arslan, 2017b; Baba and Doğan, 2018; Zümre *et al.*, 2019; Baysal and Eroğlu, 2022).
- 106. *H. minor*** G. Lister (Oran and Ergül, 2004; Ergül *et al.*, 2005b; Yağız and Afyon, 2007b).
- 107. *H. montana*** (Morgan) T. Macbr. (Baba *et al.*, 2016).
- 108. *H. pardina*** (Minakata) Ing (Baba *et al.*, 2013b, 2018; Baba and Sevindik, 2022a).
- 109. *Metatrichia floriformis*** (Schwein.) Nann.-Bremek. (Oran and Ergül, 2004).
- 110. *M. vesparia*** (Batsch) Nann.-Bremek. ex G.W. Martin and Alexop. (Ergül and Gücin, 1993; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a; Yağız and Afyon, 2005, 2007b; Oran *et al.*, 2006; Baba and Arslan, 2017b; Baba and Sevindik, 2022a).
- 111. *Oligonema affine*** (de Bary) García-Cunch., J.C.Zamora & Lado (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a; Oran *et al.*, 2006).
- 112. *O. favagineum*** (Batsch) García-Cunch., J.C.Zamora & Lado. (Härkönen, 1988; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2016; Baba and Doğan, 2018).
- 113. *O. flavidum*** (Peck) Peck (Ocak, 2015).
- 114. *O. persimile*** (P.Karst.) García-Cunch., J.C.Zamora & Lado. (Baba *et al.*, 2015; Baba and Doğan, 2018).
- 115. *O. schweinitzii*** (Berk.) G.W. Martin (Ocak and Hasenekoğlu 2003b; Baba *et al.*, 2013; Eroğlu and Kaşık, 2013a).
- 116. *O. verrucosum*** (Berk.) García-Cunch., J.C.Zamora & Lado (Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2018; Baba and Arslan, 2017b; Baba and Doğan, 2018; Zümre *et al.*, 2019).
- 117. *Prototrichia metallica*** (Berk.) Masee (Baba, 2008).
- 118. *Trichia alpina*** (R.E. Fr.) Meyl. (Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Konuk, 2018).
- 119. *T. botrytis*** (J.F. Gmel.) Pers. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005a; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015, 2016; Baba and Arslan, 2017b; Zümre *et al.*, 2019).
- 120. *T. contorta*** (Ditmar) Rostaf. (Härkönen and Uotila, 1983; Ergül and Gücin, 1995; Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Demirel *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Eroğlu and Kaşık, 2013a; Baba *et al.*, 2016, 2019; Ocak and Konuk, 2018).
- 121. *T. crateriformis*** G.W. Martin (Baba and Tamer, 2008a; Ergül and Akgül, 2011; Zümre *et al.*, 2019).
- 122. *T. erecta*** Rex (Ocak and Hasenekoğlu, 2005; Baba *et al.*, 2013; Baba and Zümre, 2015; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).
- 123. *T. flavicoma*** (Lister) Ing (Yağız and Afyon, 2006a).
- 124. *T. munda*** (Lister) Meyl. (Baba *et al.*, 2013, 2018, 2019, 2020; Baba and Doğan, 2018; Zümre *et al.*, 2019).
- 125. *T. scabra*** Rostaf. (Baba, 2015; Baba and Arslan, 2017b; Eroğlu *et al.*, 2021).
- 126. *T. subfusca*** Rex (Oran and Ergül, 2004).
- 127. *T. varia*** (Pers. ex J.F. Gmel.) Pers. (Gücin and Öner, 1986; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2005; Demirel *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015, 2018, 2021a; Eroğlu and Kaşık, 2013a; Baba and Doğan, 2018; Eroğlu *et al.*, 2021).

**Order: Physarida****Family: Didymiaceae**

- 128. *Diachea leucopodia*** (Bull.) Rostaf. (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Oran *et al.*, 2006; Baba *et al.*, 2015; Baba and Sevindik, 2022a).

- 129. *Diderma carneum*** Nann.-Bremek. (Baba and Tamer, 2008b; Baba *et al.*, 2013, 2015; Zümre *et al.*, 2019).
- 130. *D. chondrioderma*** (de Bary and Rostaf.) Kuntze (Ergül, 1992; Ergül and Dülger, 1998, 2000d; Ergül *et al.*, 2005b).
- 131. *D. cinereum*** Morgan (Oran and Ergül, 2015).
- 132. *D. crustaceum*** Peck (Dülger, 2008b).
- 133. *D. deplanatum*** Fr. (Baba, 2012; Ocak and Konuk, 2018).
- 134. *D. donkii*** Nann.-Bremek. (Ocak and Konuk, 2018).
- 135. *D. effusum*** (Schwein.) Morgan (Süerdem *et al.*, 2015).
- 136. *D. hemisphaericum*** (Bull.) Hornem. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2005; Baba *et al.*, 2013, 2015, 2018, 2019, 2020, 2021a; Ocak, 2015; Ocak and Konuk, 2018; Baba and Atay, 2019; Baba and Sevindik, 2022a).
- 137. *D. montanum*** (Meyl.) Meyl., (Baba and Sevindik, 2022b).
- 138. *D. niveum*** (Rostaf.) E. Sheld. (Ergül *et al.*, 2005b).
- 139. *D. radiatum*** (L.) Morgan (Baba *et al.*, 2013; Zümre *et al.*, 2019).
- 140. *D. spumarioides*** (Fr. & Palmquist) Fr. (Baba, 2021).
- 141. *D. testaceum*** (Schrad.) Pers. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Ocak, 2015).
- 142. *D. umbilicatum*** Pers. (Oran and Ergül, 2015).
- 143. *Didymium anellus*** Morgan (Ocak and Hasenekoğlu, 2005; Baba *et al.*, 2013, 2018).
- 144. *D. annulisporum*** H.W. Keller and Schokn. (Eroğlu and Kaşık, 2013a; Baba and Atay, 2019; Baba *et al.*, 2021a, 2021b; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).
- 145. *D. atrichum*** Henney & Alexop., (Baba *et al.*, 2021a)
- 146. *D. bahiense*** Gottsb. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2018, 2019, 2021a, 2021b; Baba and Atay, 2019; Touray and Ergül, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 147. *D. balearicum*** Ing (Ocak and Konak, 2018; Baba and Sevindik, 2020).
- 148. *D. clavus*** (Alb. and Schwein.) Rabenh. (Baba, 2015; Baba and Sevindik, 2020; Baba *et al.*, 2020).
- 149. *D. columellacavum*** Hochg., Gottsb. & Nann.-Bremek., (Baba and Sevindik, 2022b).
- 150. *D. crustaceum*** Fr. (Ocak and Hasenekoğlu, 2003a).
- 151. *D. decipiens*** Meyl., (Baba *et al.*, 2021c).
- 152. *D. difforme*** (Pers.) Gray (Ergül and Dülger, 2000a; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba, 2012; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Touray and Ergül, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 153. *D. dubium*** Rostaf. (Baba *et al.*, 2013, 2018, 2021a, 2021b; Ergül *et al.*, 2016; Baba and Atay, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 154. *D. eximium*** Peck (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Baba, 2015).
- 155. *D. floccosum*** G.W. Martin, K.S. Thind and Rehill (Ergül and Dülger, 1998, 2000d; Dülger *et al.*, 2006).
- 156. *D. iridis*** (Ditmar) Fr. (Ocak and Hasenekoğlu, 2003b; Baba and Tamer, 2008a; Baba and Atay, 2019).
- 157. *D. karstensii*** Nann.-Bremek. (Demirel and Kaşık, 2012; Eroğlu and Kaşık, 2013a).
- 158. *D. lenticulare*** K.S. Thind and T.N. Lakh. (Oran and Ergül, 2015).
- 159. *D. listeri*** Masee (Baba and Sevindik, 2021).
- 160. *D. megalosporum*** Berk and M.A. Curtis (Baba, 2012; Baba *et al.*, 2013, 2015, 2018, 2019, 2020, 2021a, 2021b; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Sevindik, 2020).
- 161. *D. melanospermum*** (Pers.) T. Macbr. (Baba *et al.*, 2008, 2013, 2015, 2016, 2019, 2021b; Baba, 2012; Zümre *et al.*, 2019; Baba and Sevindik, 2020).
- 162. *D. minus*** (Lister) Morgan (Ergül and Dülger, 2000a; Baba and Sevindik, 2022a).
- 163. *D. nigripes*** (Link) Fr. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b; Ocak and Hasenekoğlu, 2005; Baba *et al.*, 2021a).
- 164. *D. orthonemata*** H.W. Keller & T.E. Brooks (Baba *et al.*, 2021c).
- 165. *D. quitense*** (Pat.) Torrend (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Ocak and Konuk, 2018).
- 166. *D. serpula*** Fr., (Baba *et al.*, 2021a; Baba and Sevindik, 2022a).
- 167. *D. squamulosum*** (Alb. and Schwein.) Fr. & Palmquist (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Baba and Tamer, 2008a; Baba, 2012; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Zümre, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 168. *D. sturgisii*** Hagelst. (Ergül *et al.*, 2005b).
- 169. *D. trachysporum*** G. Lister (Demirel and Kaşık, 2012; Baba *et al.*, 2013, 2014; Eroğlu and Kaşık, 2013a; Baba *et al.*, 2018; Baba *et al.*, 2021b).
- 170. *D. tussilaginis*** (Berk & Broome) Masee (Baba *et al.*, 2021c).
- 171. *D. vaccinum*** (Durieu and Mont.) Buchet (Eroğlu *et al.*, 2015).
- 172. *D. verrucisporum*** A.L. Welden (Ergül *et al.*, 2016).
- 173. *Mucilago crustacea*** P. Micheli ex F.H. Wigg.

(Ergül and Dülger, 2000a, 2002a; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a).

#### Family: Physaraceae

**174. *Badhamia affinis*** Rostaf. (Härkönen and Uotila, 1983; Ergül *et al.*, 2005b; Yağız and Afyon, 2005; Touray and Ergül, 2019; Baba *et al.*, 2021a).

**175. *B. capsulifera*** (Bull.) Berk. (Ergül and Dülger, 2002c; Yağız and Afyon, 2005, 2006a; Baba *et al.*, 2016).

**176. *B. dubia*** Nann.-Bremek. (Dülger, 2008c; Baba *et al.*, 2013, 2015, 2018, 2020, 2021b; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**177. *B. foliicola*** Lister (Härkönen and Uotila, 1983; Ergül and Dülger, 1998, 2000d; Ocak and Hasenekoğlu, 2003a, 2005; Ergül *et al.*, 2005b; Yağız and Afyon, 2005; Oran *et al.*, 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2018, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba and Doğan, 2018; Baba and Sevindik, 2022a).

**178. *B. goniospora*** Meyl. (Ergül *et al.*, 2005b; Yağız and Afyon, 2006a; Ocak and Konuk, 2018; Baba and Sevindik, 2022a).

**179. *B. iowensis*** T. Macbr. (Eroğlu and Kaşık, 2013b).

**180. *B. macrocarpos*** (Ces.) Rostaf. (Gücin and Öner 1986; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Demirel *et al.*, 2006; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba, 2015; Baba *et al.*, 2013, 2015, 2018, 2019, 2021a; Eroğlu and Kaşık, 2013a; Baysal and Eroğlu, 2022).

**181. *B. melanospora*** Speg. (Dülger, 2008b; Eroğlu and Kaşık, 2013a).

**182. *B. nitens*** Berk. (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Zümre *et al.*, 2013, 2019).

**183. *B. panicea*** (Fr.) Rostaf. (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Demirel *et al.*, 2006; Yağız and Afyon, 2006a; Baba *et al.*, 2013, 2018, 2019, 2020, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baysal and Eroğlu, 2022).

**184. *B. papaveracea*** Berk. and Ravenel (Ergül *et al.*, 2005b).

**185. *B. populina*** Lister and G. Lister (Ergül *et al.*, 2005b; Baba and Tamer, 2008a).

**186. *B. utricularis*** (Bull.) Berk. (Oran and Ergül, 2004; Dülger and Gönüz 2005; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2016, 2021a; Baba, 2015; Baba and Sevindik, 2020).

**187. *B. versicolor*** Lister (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Oran *et al.*, 2006).

**188. *B. viridescens*** Meyl. (Ergül, 1992; Ergül and Dülger, 2000a).

**189. *Badhamiopsis ainoae*** (Yamash.) T.E. Brooks and H.W. Keller (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Eroğlu

and Kaşık, 2013a).

**190. *Craterium aureonucleatum*** Nann.-Bremek (Baba, 2021).

**191. *C. concinnum*** Rex (Ocak and Hasenekoğlu, 2005; Eroğlu and Kaşık, 2013a).

**192. *C. dictyosporum*** (Rostaf.) H. Neubert, Nowotny and K. Baumann (Baba and Er, 2018; Baba *et al.*, 2020).

**193. *C. leucocephalum*** (Pers. ex J.F. Gmel.) Ditmar (Ergül and Oran, 2005; Eroğlu and Kaşık, 2013a; Baba and Doğan, 2018; Baba *et al.*, 2019; Baba and Sevindik, 2022a).

**194. *C. minutum*** (Leers) Fr. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a).

**195. *C. obovatum*** Peck (Baba *et al.*, 2021a).

**196. *Fuligo cinerea*** (Schwein.) Morgan (Ocak, 2015; Baba and Atay, 2019).

**197. *F. septica*** (L.) F.H. Wigg. (Ergül and Gücin, 1994; Ergül and Dülger, 2000a, 2002c; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Yağız and Afyon, 2007b; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Eroğlu and Kaşık, 2013a; Ocak, 2015; Baba, 2017; Baba and Doğan, 2018; Baba and Atay, 2019; Baba *et al.*, 2020, 2021b).

**198. *Leocarpus fragilis*** (Dicks.) Rostaf. (Ergül and Dülger, 1998, 2000d; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005; Ergül and Akgül, 2011; Ocak, 2015; Baba *et al.*, 2019).

**199. *Physarum albescens*** Ellis ex T. Macbr. (Baba and Gelen 2014; Baba *et al.*, 2018).

**200. *Ph. album*** (Bull.) Chevall. (Ergül and Dülger, 1998, 2000d; Yağız *et al.*, 2002; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Dülger *et al.*, 2006; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, 2021a, 2021b; Baba, 2015; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a).

**201. *Ph. auripigmentum*** G. W. Martin. (Alkan *et al.*, 2016).

**202. *Ph. auriscalpium*** Cooke (Härkönen, 1988; Ergül *et al.*, 2005b; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013; Eroğlu and Kaşık, 2013a; Baba, 2015).

**203. *Ph. bitectum*** G. Lister (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Baba, 2015; Ocak and Konuk, 2018; Baba *et al.*, 2021a).

**204. *Ph. bivalve*** Pers. (Baba *et al.*, 2021a).

**205. *Ph. brunneolum*** (W. Phillips) Masee, (Baba and Sevindik, 2022b)

**206. *Ph. cinereum*** (Batsch) Pers. (Härkönen, 1988; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2018, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Zümre, 2015; Oskay



- and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Baba and Doğan, 2018; Baba and Atay, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).
- 207. *Ph. citrinum*** Schumach. (Ergül *et al.*, 2016).
- 208. *Ph. clavisporum*** G. Moreno, A. Sánchez, A. Castillo & Illana (Baba and Sevindik, 2022b)
- 209. *Ph. compressum*** Alb. and Schwein. (Ergül and Dülger, 2000a; Baba and Tamer, 2008a; Baba, 2015; Baba *et al.*, 2013, 2015, 2018, 2021a; Baba and Arslan, 2017b; Baba and Doğan, 2018; Eroğlu *et al.*, 2021; Baba and Sevindik, 2022a).
- 210. *Ph. confertum*** T. Macbr. (Baba, 2008, 2015; Baba *et al.*, 2013, 2018; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015).
- 211. *Ph. contextum*** (Pers.) Pers. (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Baba *et al.*, 2013, 2015, 2018, 2019, 2021a; Baba, 2015; Baba and Doğan, 2018; Baba and Atay, 2019).
- 212. *Ph. decipiens*** M.A. Curtis (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Yağız *et al.*, 2002; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Yağız and Afyon, 2005; Dülger *et al.*, 2006; Baba, 2015).
- 213. *Ph. dictyosporum*** G.W. Martin (Eroğlu, 2021).
- 214. *Ph. diderma*** Rostaf (Eroğlu, 2021).
- 215. *Ph. didermoides*** (Pers.) Rostaf. (Demirel and Kaşık, 2012; Eroğlu and Kaşık, 2013a; Baba, 2015; Eroğlu *et al.*, 2021; Baysal and Eroğlu, 2022).
- 216. *Ph. famintzinii*** Rostaf. (Eroğlu *et al.*, 2014, 2015; Baba, 2015).
- 217. *Ph. flavicomum*** Berk. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a; Oran *et al.*, 2006; Ergül and Akgül, 2011; Baba *et al.*, 2013; Baba, 2015; Zümre *et al.*, 2019).
- 218. *Ph. galbeum*** Wingate (Dülger, 2008a; Baba, 2015).
- 219. *Ph. globuliferum*** (Bull.) Pers. (Ergül *et al.*, 2005b; Baba, 2015; Baba and Sevindik, 2022a).
- 220. *Ph. gyrosum*** Rostaf. (Demirel and Kaşık, 2012; Eroğlu and Kaşık, 2013a; Baba, 2015; Touray and Ergül, 2019).
- 221. *Ph. javanicum*** Racib. (Baba *et al.*, 2013b, 2018).
- 222. *Ph. leucophaeum*** Fr. & Palmquist (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2016, 2018, 2019, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba *et al.*, 2016; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019).
- 223. *Ph. leucopus*** Link (Ocak and Hasenekoğlu, 2003a; Baba, 2015; Baba *et al.*, 2021b; Baba and Sevindik, 2022a).
- 224. *Ph. licheniforme*** (Schwein.) Lado (Baba *et al.*, 2012, 2018; Baba, 2015).
- 225. *Ph. luteolum*** Peck (Oran and Ergül, 2004; Baba, 2015).
- 226. *Ph. melleum*** (Berk. and Broome) Masee (Dülger *et al.*, 2016).
- 227. *Ph. murinum*** Lister (Baba and Özyiğit 2017; Zümre *et al.*, 2019).
- 228. *Ph. nivale*** (Meyl.) Mar. Mey. & Poulain (Baba and Sevindik, 2022a).
- 229. *Ph. notabile*** T. Macbr. (Ergül and Dülger, 2002c; Ocak and Hasenekoğlu, 2003a; Ergül *et al.*, 2005b; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2018, 2019, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Ocak, 2015; Ocak and Konuk, 2018; Baba and Atay, 2019; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baysal and Eroğlu, 2022).
- 230. *Ph. nudum*** T. Macbr. (Eroğlu and Kaşık, 2013b; Ocak, 2015).
- 231. *Ph. oblatum*** T. Macbr. (Ergül and Dülger, 2000a; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2018, 2019, 2020; Eroğlu and Kaşık, 2013a; Baba, 2015).
- 232. *Ph. ovisporum*** G. Lister (Ergül and Dülger, 2002c; Baba *et al.*, 2013; Baba, 2015).
- 233. *Ph. perfectum*** M. Peck (Dülger and Duman 2010; Baba, 2015).
- 234. *Ph. psittacinum*** Ditmar (Baba *et al.*, 2016).
- 235. *Ph. pulcherrimum*** Berk. and Ravenel (Ergül and Oran 2005; Baba, 2015).
- 236. *Ph. pusillum*** (Berk. and M.A. Curtis) G. Lister (Ergül and Dülger, 1998, 2000d; Yağız *et al.*, 2002; Ocak and Hasenekoğlu, 2003a; Dülger *et al.*, 2006; Oran *et al.*, 2006; Baba, 2015; Ocak and Konuk, 2018; Baba and Sevindik, 2022a).
- 237. *Ph. robustum*** (Lister) Nann.-Bremek. (Yağız and Afyon, 2007b; Demirel *et al.*, 2010; Baba, 2015; Baba *et al.*, 2019, 2020, 2021a, 2021b; Baba and Sevindik, 2022a).
- 238. *Ph. schroeteri*** Rostaf. (Baba and Özyiğit 2017).
- 239. *Ph. serpula*** Morgan (Oran and Ergül, 2015; Ocak and Konuk, 2018; Touray and Ergül, 2019).
- 240. *Ph. spectabile*** Nann.-Bremek., Lado & G. Moreno ((Eroğlu, 2021; Baba and Sevindik, 2022b).
- 241. *Ph. tropicale*** T. Macbr. (Baba and Gelen 2014; Baba *et al.*, 2018).
- 242. *Ph. vernum*** Sommerf. (Oran and Ergül, 2004; Baba, 2015; Baba *et al.*, 2021b).
- 243. *Ph. viride*** (Bull.) Pers. (Ergül and Dülger, 1998, 2000d; Ergül *et al.*, 2005a; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2015, 2016, 2018, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Arslan, 2017b).
- 244. *Protophysarum phloiogenum*** M. Blackw. and Alexop. (Oran and Ergül, 2004).
- 245. *Willkommangea reticulata*** (Alb. and Schwein.) Kuntze (Baba and Tamer, 2008b)
- Order: Stemonitida**  
**Family: Stemonitidaceae**
- 246. *Amaurochaete atra*** (Alb. and Schwein.) Rostaf. (Sümer, 1982; Abatay, 1989; Ergül and Dülger, 2000a; Yağız and Afyon, 2007b; Baba and Tamer, 2008a).



- 247. *A. comata*** G. Lister and Brândză (Eroğlu and Kaşık, 2013b).
- 248. *A. tubulina*** (Alb. and Schwein.) T. Macbr. (Oran and Ergül, 2015).
- 249. *Collaria arcyronema*** (Rostaf.) Nann.-Bremek. ex Lado (Oran and Ergül, 2004; Ergül et al., 2005b; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019).
- 250. *C. lurida*** (Lister) Nann.-Bremek. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Demirel et al., 2006; Baba and Tamer, 2008a; Baba, 2012; Baba, 2015; Baba et al., 2013, 2015, 2018, 2019, 2020; Oskay and Tüzün, 2015; Baba, 2017; Baba and Doğan, 2018; Zümre et al., 2019; Baba and Sevindik, 2020).
- 251. *C. rigidireta*** (Nann.-Bremek.) Nann.-Bremek. (Eroğlu and Kaşık, 2013a).
- 252. *C. rubens*** (Lister) Nann.-Bremek. (Härkönen, 1988; Ocak, 2015).
- 253. *Comatricha alta*** Preuss (Eroğlu and Kaşık, 2013b; Eroğlu et al., 2021).
- 254. *C. elegans*** (Racib.) G. Lister (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2005; Baba and Tamer, 2008a; Baba, 2012; Baba et al., 2013, 2021a; Eroğlu and Kaşık, 2013a; Baba and Doğan, 2018; Zümre et al., 2019).
- 255. *C. ellae*** Härk. (Ergül and Dülger, 2000a; Yağız and Afyon, 2005; Oran et al., 2006; Baba and Tamer, 2008a; Baba, 2012; Baba, 2015; Baba et al., 2013, 2015, 2016, 2018, 2019, 2020, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre et al., 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 256. *C. laxa*** Rostaf. (Härkönen and Uotila, 1983; Ergül and Dülger, 1998, 2000d; Ergül et al., 2005b; Demirel et al., 2006; Dülger et al., 2006; Oran et al., 2006; Baba and Tamer, 2008a; Baba et al., 2013, 2015, 2016, 2018, 2019, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba, 2015; Baba and Zümre, 2015;).
- 257. *C. longipila*** Nann.-Bremek. (Oran and Ergül, 2015).
- 258. *C. nigra*** (Pers. ex J.F. Gmel.) J. Schröt. (Härkönen and Uotila, 1983; Ergül and Dülger, 1998, 2000d; Yağız et al., 2002; Ocak and Hasenekoğlu, 2003a, 2005; Ergül et al., 2005b; Demirel et al., 2006; Dülger et al., 2006; Oran et al., 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba et al., 2013, 2015, 2016, 2018, 2019, 2020, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Eroğlu et al., 2014; Baba, 2015; Baba and Zümre, 2015; Ocak, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Zümre et al., 2019; Baba and Sevindik, 2020; Eroğlu et al., 2021; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).
- 259. *C. pulchella*** (C. Bab.) Rostaf. (Ergül and Dülger, 2002b; Yağız et al., 2002; Ocak and Hasenekoğlu, 2005; Demirel et al., 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba et al., 2013, 2016, 2018, 2020, 2021a; Baba, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).
- 260. *C. pulchelloides*** Nann.-Bremek. (Eroğlu and Kaşık, 2013a).
- 261. *C. suksdorfii*** Ellis and Everh. (Dülger et al., 2007).
- 262. *C. tenerrima*** (M.A. Curtis) G. Lister (Ocak and Hasenekoğlu, 2005; Oran et al., 2006; Baba, 2012; Baba et al., 2013; Baba, 2015; Baba and Atay, 2019; Baba and Sevindik, 2020).
- 263. *Diacheopsis minuta*** Nann.-Bremek. and Y. Yamam. (Ocak, 2015).
- 264. *Enerthenema papillatum*** (Pers.) Rostaf. (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Yağız and Afyon, 2005, 2006a; Demirel et al., 2006; Oran et al., 2006; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Baba et al., 2013, 2015, 2016, 2018, 2019, 2020; Eroğlu and Kaşık, 2013a; Eroğlu et al., 2014; Baba, 2015; Baba and Zümre, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Touray and Ergül, 2019; Zümre et al., 2019).
- 265. *Lamproderma arcyrioides*** (Sommerf.) Rostaf. (Härkönen, 1988; Ergül and Dülger, 2000a; Ergül and Akgül, 2011; Baba et al., 2013, 2016, 2018, 2019, 2020, 2021a, 2021b; Zümre et al., 2019; Baba and Sevindik, 2022a).
- 266. *L. columbinum*** (Pers.) Rostaf. (Oran and Ergül, 2004).
- 267. *L. laxum*** H. Neubert (Baba et al., 2013; Zümre et al., 2019).
- 268. *L. scintillans*** (Berk. and Broome) Morgan (Ocak and Hasenekoğlu, 2005; Baba et al., 2013, 2015, 2018; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).
- 269. *Macbrideola cornea*** (G. Lister and Cran) Alexop. (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Ergül et al., 2005b; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005, 2006a; Oran et al., 2006; Baba and Tamer, 2008a; Baba et al., 2013, 2016, 2018, 2020, 2021a; Baba, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Ocak and Konuk, 2018; Touray and Ergül, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a; Baysal and Eroğlu, 2022).
- 270. *M. decapillata*** H.C. Gilbert (Ergül and Dülger, 2000a; Yağız et al., 2002; Ergül et al., 2005b; Dülger et al., 2006; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba et al., 2013b, 2018, 2020; Baba and Zümre, 2015; Touray and Ergül, 2019).
- 271. *M. dubia*** Nann.-Bremek. and Y. Yamam. (Ergül et al., 2005b; Ocak, 2015; Ocak and Konuk, 2018).
- 272. *M. macrospora*** (Nann.-Bremek.) Ing (Yağız

and Afyon, 2006a, 2006c, 2007a; Baba *et al.*, 2013b).

**273. *M. martinii*** (Alexop. and Beneke) Alexop. (Oran and Ergül, 2004; Baba and Tamer, 2008a; Touray and Ergül, 2019).

**274. *M. oblonga*** Pando and Lado (Ocak and Konuk, 2018; Touray and Ergül, 2019).

**275. *M. scintillans*** H.C. Gilbert (Ergül and Dülger, 2002c; Ergül *et al.*, 2005b).

**276. *M. synsporos*** (Alexop.) Alexop. (Ergül and Dülger, 2000a; Ergül *et al.*, 2005b; Baba and Tamer, 2008a; Ergül and Akgül, 2011; Ocak, 2015).

**277. *Meriderma cribrarioides*** (Fr.) Mar. Mey. and Poulain (Baba, 2012).

**278. *Paradiacheopsis acanthodes*** (Alexop.) Nann.-Bremek. (Ergül and Dülger, 2000c; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006).

**279. *P. cribrata*** Nann.-Bremek. (Oran and Ergül, 2004).

**280. *P. erythropodia*** (Ing) Nann.-Bremek. (Ocak and Konuk, 2018).

**281. *P. fimbriata*** (G. Lister and Cran) Hertel ex Nann.-Bremek. (Härkönen and Uotila, 1983; Härkönen, 1988; Ergül and Dülger, 2000a; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baysal and Eroğlu, 2022).

**282. *P. longipes*** Hooff and Nann.-Bremek. (Zümre and Baba, 2015; Baba *et al.*, 2019).

**283. *P. microcarpa*** (Meyl.) D.W. Mitch. ex Ing (Oran and Ergül, 2004; Ocak and Konuk, 2018).

**284. *P. rigida*** (Brändzä) Nann.-Bremek. (Ergül and Dülger, 2000c; Oran and Ergül, 2004; Ergül and Akgül, 2011; Baba *et al.*, 2013; Zümre *et al.*, 2019).

**285. *P. solitaria*** (Nann.-Bremek.) Nann.-Bremek. (Ergül and Dülger, 2000c; Oran *et al.*, 2006; Ergül and Akgül, 2011).

**286. *Stemonaria irregularis*** (Rex) Nann.-Bremek., R. Sharma and Y. Yamam. (Ergül and Dülger, 2002c; Yağız and Afyon, 2007b).

**287. *Stemonitis axifera*** (Bull.) T. Macbr. (Ergül and Dülger, 2002c; Ergül *et al.*, 2005c, 2005b; Ocak and Hasenekoğlu, 2005; Demirel *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018; Ocak, 2015; Baba and Arslan, 2017b; Baba and Doğan, 2018; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).

**288. *S. flavogenita*** E. Jahn (Härkönen and Uotila, 1983; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2005; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba, 2015; Baba *et al.*, 2013, 2015, 2016; Ocak, 2015; Zümre *et al.*, 2019).

**289. *S. foliicola*** Ing (Baba, 2008, 2012; Baba *et al.*, 2013; Eroğlu and Kaşık, 2013a; Eroğlu *et al.*, 2021).

**290. *S. fusca*** Roth (Härkönen and Uotila, 1983; Ergül and Dülger, 1998, 2000d; Ergül *et al.*, 2005a; Ocak and Hasenekoğlu, 2005; Yağız and Afyon, 2005; Dülger *et al.*, 2006; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, ; Eroğlu and Kaşık, 2013a; Eroğlu *et al.*, 2014; Baba and Zümre, 2015; Ocak, 2015;

Oskay and Tüzün, 2015; Baba and Doğan, 2018; Baba and Atay, 2019; Baba *et al.*, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**291. *S. herbatica*** Peck (Ergül and Dülger, 2002c; Yağız *et al.*, 2002; Ergül *et al.*, 2005a, 2005b; Ocak and Hasenekoğlu, 2005; Oran *et al.*, 2006; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2016; Eroğlu and Kaşık, 2013a; Ocak and Konuk, 2018; Zümre *et al.*, 2019).

**292. *S. inconspicua*** Nann.-Bremek. (Oran and Ergül, 2015).

**293. *S. mediterraneensis*** H.H. Doğan and Eroğlu (Doğan and Eroğlu 2014).

**294. *S. pallida*** Wingate (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Eroğlu and Kaşık, 2013a; Baba *et al.*, 2016; Baba and Doğan, 2018).

**295. *S. splendens*** Rostaf. (Gücin and Öner, 1986; Ergül and Dülger, 2000a; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2005; Baba *et al.*, 2013; Baba, 2015; Baba and Arslan, 2017b; Baba *et al.*, 2018).

**296. *S. virginiensis*** Rex (Ergül and Dülger, 2002c; Ergül *et al.*, 2005a, 2005b; Yağız and Afyon, 2006a; Ocak, 2015; Eroğlu *et al.*, 2021).

**297. *Stemonitopsis amoena*** (Nann.-Bremek.) Nann.-Bremek. (Yağız and Afyon, 2005, 2006b; Baba and Tamer, 2008a; Baba, 2012; Baba, 2015; Baba *et al.*, 2013, 2015, 2016, 2018, 2019, 2020, 2021a, 2021b; Eroğlu and Kaşık, 2013a; Baba and Zümre, 2015; Oskay and Tüzün, 2015; Baba, 2017; Baba and Arslan, 2017b; Baba and Doğan, 2018; Baba and Atay, 2019; Zümre *et al.*, 2019; Baba and Sevindik, 2020; Baba and Sevindik, 2022a).

**298. *S. gracilis*** (G. Lister) Nann.-Bremek. (Yağız and Afyon, 2005, 2006b; Eroğlu and Kaşık, 2013a).

**299. *S. hyperopta*** (Meyl.) Nann.-Bremek. (Ergül and Dülger, 2000a; Ocak and Hasenekoğlu, 2003a, 2005; Yağız and Afyon, 2006a; Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015, 2018, 2020; Zümre *et al.*, 2019; Baba and Sevindik, 2022a).

**300. *S. microspora*** (Lister) Nann.-Bremek. (Ergül and Dülger, 2000a; Yağız and Afyon, 2006a).

**301. *S. reticulata*** (H.C. Gilbert) Nann.-Bremek. and Y. Yamam. (Baba and Tamer, 2008a; Baba *et al.*, 2013, 2015; Zümre *et al.*, 2019; Baba *et al.*, 2020).

**302. *S. subcaespitosa*** (Peck) Nann.-Bremek. (Ergül and Dülger, 2002c; Oran *et al.*, 2006; Baba *et al.*, 2013, 2015, 2016, 2018, 2020; Zümre *et al.*, 2019).

**303. *S. typhina*** (F.H. Wigg.) Nann.-Bremek. (Härkönen, 1988; Ergül and Dülger, 2000a, 2000d; Ergül *et al.*, 2005a, 2005b; Oran *et al.*, 2006; Ergül and Akgül, 2011; Baba *et al.*, 2013, 2018, 2019).

**304. *Symphytocarpus amaurochaetoides*** Nann.-Bremek.: (Baba and Sevindik, 2020; Baba *et al.*, 2020).

**305. *S. confluens*** (Cooke and Ellis) Ing and Nann.-Bremek. (Eroğlu and Kaşık, 2013b; Oran and Ergül, 2015).

**306. *S. flaccidus*** (Lister) Ing and Nann.-Bremek.

(Ergül and Dülger, 1999, 2000d; Baba and Atay, 2019).

307. *S. herbaticus* Ing (Baba *et al.*, 2016).

308. *S. impexus* Ing and Nann.-Bremek. (Baba *et al.*, 2008; Baba, 2015).

309. *S. trechisporus* (Berk. ex Torrend) Nann.-Bremek (Baba *et al.*, 2013; Zümre *et al.*, 2019).

### A list of synonyms

*Cribraria persoonii* Nann.-Bremek., = *Cribraria aurantiaca* Schrad.

*Arcyodes incarnata* (Alb. & Schwein.) O.F. Cook = *Arcyria congesta* (Sommerf.) Berk. & Broome

*Perichaena chrysosperma* (Curr.) Lister, = *Ophiotheca chrysosperma* Curr.

*Perichaena pedata* (Lister & G. Lister) G. Lister ex E. Jahn, = *Ophiotheca pedata* (Lister & G. Lister) García-Cunch., J.C. Zamora & Lado.

*Perichaena vermicularis* (Schwein.) Rostaf., = *Gulielmina vermicularis* (Schwein.) García-Cunch., J.C. Zamora & Lado.

*Trichia affinis* de Bary, = *Oligonema affine* (de Bary) García-Cunch., J.C. Zamora & Lado

*Trichia decipiens* (Pers.) T. Macbr., = *Hemitrichia decipiens* (Pers.) García-Cunch., J.C. Zamora & Lado.

*Trichia favoginea* (Batsch) Pers., = *Oligonema favogineum* (Batsch) García-Cunch., J.C. Zamora &

Lado.

*Trichia lutescens* (Lister) Lister, = *Hemitrichia lutescens* (Lister) García-Cunch., J.C. Zamora & Lado.

*Trichia persimilis* P. Karst., = *Oligonema persimile* (P. Karst.) García-Cunch., J.C. Zamora & Lado.

*Trichia verrucosa* Berk., = *Oligonema verrucosum* (Berk.) García-Cunch., J.C. Zamora & Lado

*Comatricha rigidireta* Nann.-Bremek., = *Collaria rigidireta* (Nann.-Bremek.) Nann.-Bremek.

### Conclusion

As a result of the literature research, the number of myxomycetes reported in Türkiye was 309. Considering the number of species, it was seen that Physarum was the richest with 45 species. It is followed by Didymium with 30 species, Licea with 23 species, Arcyria with 21 species and Cribraria with 20 species.

### Author's contribution

The authors contributed equally to the article.

### Conflict of interest

Authors declare that there is no conflict of interest.

**Table 1.** Diversity of myxomycetes in Türkiye.

Orders	Families	Genera	Species
Echinostellida	Clastodermataceae	<i>Clastoderma</i>	2
	Echinosteliaceae	<i>Echinostelium</i>	10
	Cribrariaceae	<i>Cribraria</i>	20
Liceida	Dictydiaethaliaceae	<i>Lindbladia</i>	1
		<i>Dictydiaethalium</i>	1
	Liceaceae	<i>Licea</i>	23
	Reticulariaceae	<i>Lycogala</i>	3
		<i>Reticularia</i>	5
		<i>Tubifera</i>	1
	Trichiida	Arcyriaceae	<i>Arcyria</i>
<i>Gulielmina</i>			1
Dianemataceae		<i>Ophiotheca</i>	2
		<i>Perichaena</i>	4
Trichiaceae		<i>Calomyxa</i>	1
		<i>Dianema</i>	3
		<i>Hemitrichia</i>	10
		<i>Metatrichia</i>	2
		<i>Oligonema</i>	6
		<i>Prototrichia</i>	1
	<i>Trichia</i>	10	
	<i>Diachea</i>	1	
Physarida	Physaraceae	<i>Diderma</i>	14
		<i>Didymium</i>	30
		<i>Mucilago</i>	1
		<i>Badhamia</i>	15
		<i>Badhamiopsis</i>	1
		<i>Craterium</i>	6
		<i>Fuligo</i>	2

		<i>Leocarpus</i>	1
		<i>Physarum</i>	45
		<i>Protophysarum</i>	1
		<i>Willkommlangea</i>	1
	Stemonitidaceae	<i>Amaurochaete</i>	3
		<i>Collaria</i>	4
		<i>Comatricha</i>	10
		<i>Diacheopsis</i>	1
		<i>Enerthenema</i>	1
		<i>Lamproderma</i>	4
	Stemonitida	<i>Macbrideola</i>	8
		<i>Meriderma</i>	1
		<i>Paradiacheopsis</i>	8
		<i>Stemonaria</i>	1
		<i>Stemonitis</i>	10
		<i>Stemonitopsis</i>	7
		<i>Symphytocarpus</i>	6
	<b>5</b>	<b>12</b>	<b>45</b>
			<b>309</b>

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