

MULTIPLICISPHAERIDIUM bifurcatum Staplin, Gansornus & Poceck 1965

S. J. P. 1965, p. 182, pl. 18, fig. 13

emend Loeblich & Tappan 1978, p. 276

Sargeant & Stancliffe 1997 (pl. 4, fig. 1) Late Ordovician

Smelror et al. 1997 : Late Ashgill offshore South Norway

S.J.P. 1965 : Middle Ordovician Quebec Canada

Tynni, 1975 (p. 28, pl. III, fig. 9) : Ordovician (:middle) Bothnian Sea

Loeblich & Tappan 1974 (p. 1276, pl. 14, figs 1, 2) : Middle Ordovician Canada

Jacobson & Achar 1985 (p. 184-186, pl. 6, fig. 1) : early/middle Peltigillian, E Canada

Martin 1978a : Varadovian, E Canada

Diez & Cramer 1974 : Llanvirnian - Llandeilian range

Li 1990 (p. 149, pl. 3, figs. 5, 6) Arenigian, Hunan China

Kjellström 1971a (p. 46, pl. 3 fig. 6) : Middle Ordovician (Viruan), Sweden

Diez and Cramer 1977a : Werlockian range

Vavrdova 1988 : latest Ordovician (Czechoslovakia)

(?) Dufka 1990 a (pl. 1, fig 5) latest Ashgillian Czechoslovakia  
(pl. 5, fig 10, pl. 6, fig 4) : Early Llandoveryan

Uutela & Tynni 1991 (p. 88 pl. 19, fig. 193) Arenig-E. Llandovery Estonia

(cf.) Tappan 1980 (Figure 3.10.5) Late Ordovician Oklahoma USA

Khanna 1984 (pl. 1, fig 3) M. Ordovician / E. Silurian Tethys Himalaya

Lister, Cocks & Rushton 1969 : Caradoc SE England

Reitz & Heuse 1994 : Late Ordovician Germany

MULTIPLICISPHAERIDIUM bifurcatum Staplin et al. 1965

- Çavardel-syooki 1997 (pl. 4, fig. 5): Caradoc Southern Iran  
Li 1990b: Arenig / Llanvirn Hu' China  
Heuse 1994 (p. 373, Figures 7.1-7.2) Caradoc / Ashgill, Saxony Germany  
Pöthe de Balds 1997b (p. 48 pl. 3, fig. 8): Early / Middle Llandovery  
San Juan Province Argentina  
Wicander, Playford & Robertson 1999 (p. 17, 19, Fig. 10.4)  
Ashgill (Richmondian) Northeastern Missouri USA  
Uutela 1989 (p. 33-34 pl. 7, fig. 55): Middle Ordovician  
coast of southwestern Finland  
Pöthe de Balds 2000 (p. 334, Figure 4s): Middle / Late Ludlovian  
Central Precordillera, San Juan Argentina  
Erkmen 1979: 'Early - Late Ordovician' Southeast Turkey  
Jacobson 1987 (figure 1D) Early / Middle Ashgill  
NB Late Ordovician marker species  
Yin & Playford 2003 (pl. 4, fig. 3) Middle Ordovician  
Changshan County, Zhejiang China

Vecoli 2008: Ashgill - Middle Llandovery

{ Shavidel - Syooki, 2000 (p. 3, fig. 15) Caradoc - Ashgill  
Kopet-Dagh Region, NE Alburz Range Iran

Tynni 1982b (p. 75-76, pl. 12, figs. 84, 88): Middle Ordovician  
Åland Islands SW Finland

Vecoli 1999 (p. 47 pl. 10, fig. 2): Ashgill, Algeria

{ Shavidel - Syooki, 2003b : Ashgill, eastern Central Iran

(pl. 6, figs. 8-9, pl. 7, fig. 10)

(cf.) Rubinstein & Vaccari 2004 : latest Ordovician / earliest Silurian  
Puna region north-west Argentina

(p. 1051, text-fig. 6c)

Vecoli & Le Hérisse 2004 : 'late' Caradoc - post-Ashgill  
northern Gondwana

Wright & Meyers 1981 (p. 25, pl. 3, fig. E, pl. 6, fig. E) Ashgill, NE Kansas USA

(cf.) Umnova 1974 : Tremadoc - Ludlow, Russian Platform, USSR

{ Shavidel - Syooki, 2006 (pl. 3, fig. 3): Caradoc

Kuh-e-Kharabash, near Del-Molla, Central Alburz Range, N Iran

Playford & Wicander 2006 : Richmondian (= Ashgill)

(p. 25, pl. 18, figs. 5-6) southern Oklahoma USA

Burova 1978 : Siedinnian - Siegenian, Lvov Depression, Ukraine USSR



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- Elaouad-Debbaj (1978) 1981 : Caradoc  
 (p 43-44, pl. 18, fig 14) Bucaco Syncline Portugal  
 Shavidel-syooki & Hoseinzadeh' 2007 abstract: Late Ordovician  
 southeastern Caspian northern Iran
- Delabroye, Vecoli & Servais 2007 abstract: Late Ordovician (Late Hirnantian)  
 Anticosti Island Quebec Canada
- Shavidel-syooki 2006 abstract: Late Ordovician  
 Khorkeylagh area NE Alborz Mountains Iran
- Shavidel-syooki 2006 b' (pl. 4, fig. 7): Caradoc  
 Kuh-e-Kharbakh Central Alborz Mt. Range North Iran
- Paris, Le Hérouvé, Monod et al. 2007: late Late Ordovician (Hirnantian)  
 Taurus range, southern Turkey
- Shavidel-syooki 2009 abstract: Ashgill  
 Fazelabad area SE of Caspian Sea  
 Alborz Mountains North Iran
- Playford & Wicander 2004 abstract: Ashgill' (Richmondian)  
 southern Oklahoma USA

Whelan 1988 Thesis (p. 245-246, pl. 16, fig. 9 & 11):  
Caradoc, Dob's Linn near Moffat, Dumfriesshire Scotland  
Ashgill, Sirvan, 'Ayrshire' Scotland

MULTIPLICISPHAERIDIUM bifurcatum (Thur) Eizenack, Cramer & Diez

1976, p. 449

1973b *Filisphaeridium bifurcatum* Thur, p. 114, pl. 105, fig. 12

illegitimate combination; junior homonym

> *M. thurii* by Fensholt et al. 1990 p. 356

> *MARTINSPHAERIDIUM?* by Sargeant & Vavrdova 1997 p. 28

Thurs 1973 b: Werlockian, Ontario, Canada

~~Wheaton 1988 thesis~~



MULTIPLICISPHAERIDIUM bifurcatum

Khanna, Bagati, Azmi, Sah 1983 p 266 nomen nudum

Khanna et al. 1983 : Ordo-Silurian, Spiti Valley, Himachal Pradesh India