Schránkové koncentrácie s *Bositra buchi*: interpretácia paleoprostredia, vzniku koncentrácií a vláknovej mikrofácie

Ciele práce:
(1) analýza zmien v hustote a velkosti schránok larvalnej a postlarvalnej *Bositra buchi* v case (?aalen, bajok, bat, kelovej, ciastocné podrozdelenie do podstupnov) a pozdlz batymetrickeho gradientu of plytkej, svahovej, po hlbokú cast bradloveho pasma (4 batymetrické zóny),
(2) rozdiely v hustote and velkosti schránok medzi siliciklastickymi faciam (napr. Harcygrundske facie – aalen) a pelagickymi karbonátovými fáciami (bajok-kelovej),
(3) dodatocna moznost - analyza cementu s katodovou luminescenciou,
(4) dodatocna moznost - zachovanie a struktura schránok (mozno SEM).

[Dodatocne analyzy v ramci APVV projektu – izotopy C a stopove prvky (korelacia medzi abundanciou a geochemickými indikátormi) – dalsie stádium, pravdepodobne ale nie v ramci tejto diplomovej práce]

Hypotézy pre vznik larválnych koncentrácií: Oschmann (1993): synchronizácia larválneho stádia s obdobiami anoxia – pocas anoxie planktonické larvy pretrvávajú v prekyslicenych castiach vodného stlpca, metamorfóza moze byt posunuta o nejaky cas pocas trvania anoxie (teleplanický vývin). Interpretácie bositrových koncentrácií (pavements) v toarkských ciernych bridliciach: masová mortality larválnych stádií pocas usadenia na anoxické dno (**nedostatok kyslíka**). Oschmann (1993): Bositra v karbonátových fáciach – larválne stádiá kvoli silnej vypuklosti schránok (1 mm-schránky na fotografiách - *hranica medzi larvalnym a postlarvalnym stadiom sa bude musiet urcit*). Nedostatok kyslika moze byt málo pravdepodobny pre pelagické fácie bradlového pásma – alternatíva moze byt **nedostatok fytoplanktonu,** alebo zmeny v **chemizme/pH** ktoré postihujú kalcifikáciu schránok. **Nebiologické alternatívy**: maximálne koncentrácie súvisia s kondenzáciou, so zvýsenou cementáciou schránok, alebo sekundárne nahromadenia fyzikálnym transportom.

Hypotézy pre vznik koncentrácií juvenilov-adultov: opak pre larválne stádia – dostatok kyslíka alebo eutrofické eventy.

Lokality ?aalen, bajok-kelovej (napr. zacat s malymi vybrusmi ktore su uz urobene):
Pelagické karbonaty
Plytká cast Corstynskej jednotky - Stepnica, Babiná
Hlbsia cast Corstynskej jednotky (hluznate facie) - Dolný Mlyn, Vrsatec, Cerveny Kamen-Pruske
Prechodné svahové jednotky (Pruská, Niedzická, Czertezik)
Panvové jednotky (Branisko, Kysuce, Pieniny)
Aalen – zmiesané harcygrundské fácie: výbrusy?

Údaje pre analýzy:
(1) velkosti individuálnych prierezov vo výbrusoch – dlzka a hrúbka schránok – output: (a) rozmiestnenie (distribúcia) velkosti schránok vo vybruse, (2) priemerná velkost prierezov
(2) pritomnost alebo nepritomnost rozpustania (?moze byt indikovane hrúbkou schránky), bioerozie, alebo zelezitych povlakov
= tieto dve analyzy by sa mali robit ako prve a sucasne
(3) volumetrický obsah schránok vo výbrusoch – point-counting (mikroskop u Milana Sýkoru) alebo semikvantitatívne obsahy na základe porovnávacích tabuliek, oddelene pre larvalne stadia (hranica – 4 mm pre *Bositra radiata* z toarku – Oschmann 1994, adulty – 4-8 cm pre *Bostra radiata*) a pre postlarvalne stadia
(4) obsah mikritu, cementu, ostatné komponenty (krinoidy, amonity, intraklasty etc.)
(5) bioturbácia, usporiadanie schránok

Význam: obrovský geografický rozsah vláknových fácií pocas strednej jury

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