Fig. 1

RESULTS OF BIVALVE DHMBA EXTRACTION TEST (HEATING)

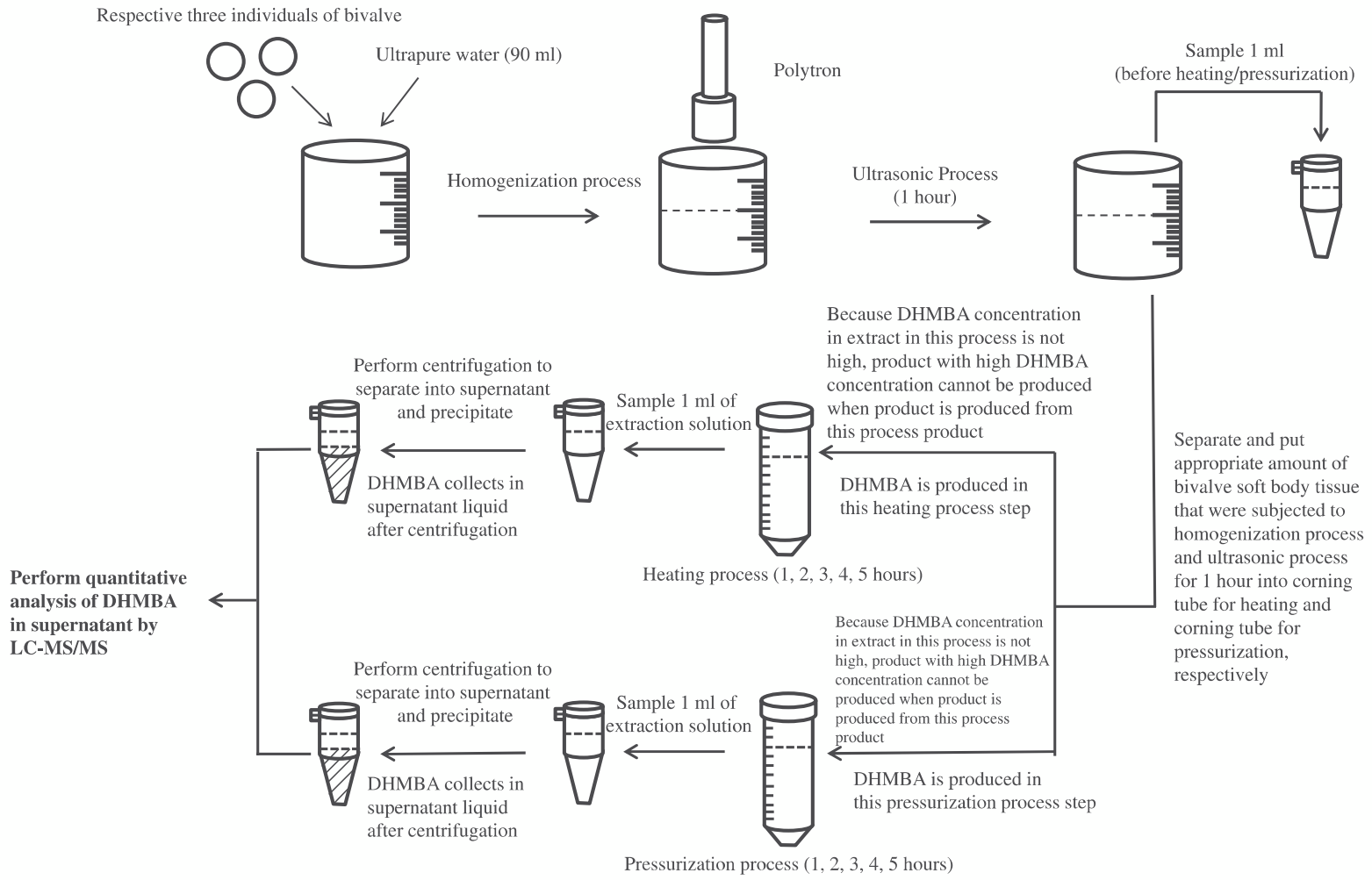
| SPECIES | CULTIVATION AREA | DHMBA CONCENTRATION IN BIVALVE SOFT BODY TISSUE (ng/g) | | | | |
|---|---|---|---|---|---|---|
| | | 1 HOUR | 2 HOURS | 3 HOURS | 4 HOURS | 5 HOURS |
| ATRINA PECTINATA | AICHI | 389.5 | 758.3 | 1127.6 | 1660.7 | 2186.3 |
| MEGANGULUS VENULOSUS | HOKKAIDO | 174.4 | 368.0 | 645.4 | 928.0 | 1233.3 |
| ANADARA BROUGHTONII | OITA | 0.0 | 0.0 | 0.0 | 0.0 | 61.4 |
| MYTILUS CORUSCUS | MIYAGI | 0.0 | 0.0 | 0.0 | 0.0 | 122.6 |
| PATINOPECTEN YESSOENSIS | MIYAGI | 0.0 | 75.4 | 148.7 | 257.8 | 393.3 |

Fig.2

RESULTS OF BIVALVE DHMBA EXTRACTION TEST (PRESSURIZATION)

| SPECIES | CULTIVATION AREA | DHMBA CONCENTRATION IN BIVALVE SOFT BODY TISSUE (ng/g) | | | | |
|---|---|---|---|---|---|---|
| | | 1 HOUR | 2 HOURS | 3 HOURS | 4 HOURS | 5 HOURS |
| ATRINA PECTINATE | AICHI | 735.9 | 1711.7 | 2774.7 | 5163.8 | 7073.4 |
| MEGANGULUS VENULOSUS | HOKKAIDO | 1063.3 | 1502.4 | 2276.7 | 2190.3 | 3809.5 |
| ANADARA BROUGHTONII | OITA | 0.0 | 0.0 | 131.9 | 234.2 | 416.7 |
| PSEUDOCARDIUM SACHALINENSE | HOKKAIDO | 0.0 | 0.0 | 228.4 | 0.0 | 175.8 |
| MERETRIX LUSORIA | CHIBA | 0.0 | 0.0 | 0.0 | 109.9 | 236.0 |
| MYTILUS CORUSCUS | MIYAGI | 0.0 | 0.0 | 268.3 | 390.2 | 742.0 |
| PATINOPECTEN YESSOENSIS | MIYAGI | 169.7 | 237.4 | 387.7 | 436.6 | 731.4 |

Fig.3


Respective three individuals of bivalve
Ultrapure water (90 ml)
Homogenization process
Polytron
Ultrasonic Process
(1 hour)
Sample 1 ml
(before heating/pressurization)
Because DHMBA concentration in extract in this process is not high, product with high DHMBA concentration cannot be produced when product is produced from this process product
Separate and put appropriate amount of bivalve soft body tissue that were subjected to homogenization process and ultrasonic process for 1 hour into corning tube for heating and corning tube for pressurization, respectively
Perform centrifugation to separate into supernatant and precipitate
Sample 1 ml of extraction solution
DHMBA collects in supernatant liquid after centrifugation
DHMBA is produced in this heating process step
Heating process (1, 2, 3, 4, 5 hours)
Perform quantitative analysis of DHMBA in supernatant by LC-MS/MS
Because DHMBA concentration in extract in this process is not high, product with high DHMBA concentration cannot be produced when product is produced from this process product
Perform centrifugation to separate into supernatant and precipitate
Sample 1 ml of extraction solution
DHMBA collects in supernatant liquid after centrifugation
DHMBA is produced in this pressurization process step
Pressurization process (1, 2, 3, 4, 5 hours)