|  |  |
| --- | --- |
| **SUBSTANTIAL MODULE 1.**  **MICROSCOPICAL DESCRIPTIONS:** | |
| **Topic: POLYSSACCHARIDES**  **MARSHMALLOW ROOT -  *Althaeae radices*** | |
| алтей-корень | Anatomical features of marshmallow root:  1 – parenchymal cells with starch grains;  2 – bast fibers;  3 – small groups of fibers;  4 – vessels;  5 – tracheids;  6 – medullar rays;  7 – cells with mucilage;  8 – druses. |
| **MARSHMALLOW LEAF – *ALTHAEAE FOLIА*** | |
|  | Anatomical features of marshmallow leaf:  1 – upper epidermal cells;  2 – lower epidermal cells;  3 – druses;  4 – druses;  5 – simple multicellular hairs;  6 – star-shaped hairs;  7 – basis of a hair. |
| **COMMON PLANTAIN LEAF –  *PLANTAGINIS MAJORIS FOLIА*** | |
| подорожник-лист | Anatomical features of сommon plantain leaf:  1 – upper epiderm;  2 – lower epiderm;  3 – cuticle folds;  4 – stomata;  5 – simple hair;  6 – capitate hair on a single-celled stalk;  7 – capitate hair on a multicellular stalk |
| **Topic: VITAMINS.** | |
| **DOG ROSE FRUITS –  *ROSAE FRUCTUS*** | |
| **шиповник-микро** | Anatomical features of dog rose fruits:  1 – hypanthium epiderm;  2 – hypanthium flesh with cells bearing chromoplasts and druses; 3 – stony cells;  4 – large simple hairs;  5 – fragments of vessels;  6 – druses. |
| **NETTLE LEAF –  *URTІCAE FOLІA*** | |
| крапива-микро | Anatomical features of nettle leaf:  1 – upper epiderm;  2 – lower epiderm;  3 – stomata;  4 – cistiliths;  5 – siple retort-shaped hairs;  6 – stinging hair;  7 – glandular hairs;  8 – druses along the vein. |

|  |  |
| --- | --- |
| **SHEPHERD’S PURSE HERB – *Bursae pastorіs Herba*** | |
| сумка-микро | Anatomical features of shepherd’s purse herb:  1 – upper epiderm;  2 – lower epiderm;  3 – stomata;  4 – simple multiended hairs;  5 – large single-cellular hair;  6 – double-ended simple hair. |