

of the plastic bag and is transported back into the disinfection- and cleaning bath in the container 14. Then the robot 1 exchanges the hand 5 for the hand 6. With the hand 6 it removes a disposable pipette from the hole magazine 10 and then—whilst holding the disposable pipette secure—removes a petri dish from the stack magazine 13. It carries this petri dish to the intermediate deposit site 28 of the spiral plater 26, where the lid of the petri dish is removed, and from there onto the receiving plate 27. There, the nutrient medium of the petri dish is injected, for which the sample liquid contained in the hose section is pressed with hydraulic pressure into the dosing pump of the spiral-plater and is sprayed out by means of the dosing pump through the injection nozzle in the described manner. Whilst the injection process is running, the robot 1 immerses the disposable pipette into the opened plastic bag in the holding station 19 and sucks up further sample liquid therewith. Then the robot moves back to the spiral-plater, grasps the petri dish there, carries it to the intermediate deposit site 28, where the lid is put on again, and brings it from there into the incubator 30 onto one of the three stacks whereby the whole time the filled disposable pipette travels with it. Then a second petri dish is removed from stack magazine 13, is transported to the spiral-plater in the described manner, is opened there and is placed onto the receiving dish 27.

Whilst the second petri dish is injected, the robot moves to one of the two stack magazines 11 or 12. There, by means of a fixed lifting and suction device, the lids of two petri dishes are removed and in each case a new sector of their nutrient medium is injected dropwise out of the disposable pipette. Then the lids are put on again. Then the robot travels with the hand 6 to the stripper 22, by means of which the disposable pipette is stripped off by raising the hand, so that it falls into the waste opening 21. Then the second petri dish, which has been injected in the meantime, is brought from the spiral-plater 26 to the incubator 30. Finally, the plastic bag is freed from the clamping jaws 20 of the holding station 19 and likewise falls into the waste opening 21. The hand 6 is exchanged again for the hand 5 and a new operating cycle can begin. Through a back and forth movement of the sliders of the magazine 13, two new petri dishes are brought into the range of action of the robot 1. When at the end of a cycle all four sectors of the petri dishes from the magazines 11 and 12 are injected, before a changeover of hands, in an interposed operating step the corresponding petri dishes are also transferred into the incubator 30 and new petri dishes are brought into the range of action of the robot 1 by back and forth movement of the sliders of the magazines 11 and 12.

In an alternative to the operating sequence which has been explained, the plastic bags initially remain in the stomacher after the comminution and homogenisation of the sample, so that the sample liquid is removed there from the opened bag. At the end, the plastic bag is thrown directly into the waste opening 21. Through this, the operating sequence is somewhat simpler. On the other hand, the risk of an undesired contamination of the stomacher is somewhat greater.

We claim:

1. Method for supplying a foodstuff sample for microbiological testing, comprising supplying the sample in a plastic bag, adding physiological nutrient solution to the sample in the plastic bag in a specified weight ratio, mechanically comminuting and homogenizing the con-

tents of the bag, removing a partial quantity of the contents of the bag by means of a pipette via a filter as sample liquid, injecting the sample liquid onto at least one nutrient medium situated in a petri dish, and inserting the injected petri dish into an incubator; said method further comprising, in the comminution and homogenization of the contents of the bag, clamping the plastic bag shut and pressing the plastic bag between a fixed jaw and two jaws which oscillate alternately; in the injection of the nutrient medium, injecting the sample liquid out in a spiral shape onto the nutrient medium; employing a laboratory robot system including a laboratory robot to carry out all handling processes by means of a mechanical hand; and controlling the robot and all participating laboratory apparatus with a control unit programmed according to a sequence of examination.

2. Method according to claim 1, wherein the sample in the plastic bag is weighed and the physiological nutrient solution is added respectively in a quantity corresponding to the weight which was determined.

3. Method according to claim 1, wherein the processed plastic bag is transported out of a stomacher where its contents are comminuted and homogenized to a stationary holding device where the sample liquid is removed.

4. Method according to claim 3, wherein the stationary holding device is situated over a waste opening.

5. Method according to claim 3, wherein a pipette is used for the removal of sample liquid, which pipette is surrounded by a mechanical screen, and wherein after each removal operation the pipette is inserted into a disinfection and cleaning bath activated by ultrasonics.

6. Method according to claim 5, wherein the pipette is removed from the disinfection and cleaning bath and is set aside to drip while the stomacher is in operation.

7. Method according to claim 1, wherein the sample liquid is sucked out of the plastic bag into a hose section and is transported therefrom through hydraulic pressure into a dosing pump included in a spiral plater employed for injecting the sample liquid in the spiral shape.

8. Method according to claim 7, wherein in each case after the injecting of the sample liquid, the spiral-plater is flushed with cleaning and disinfection liquids.

9. Method according to claim 1, wherein for the handling of the plastic bags, the laboratory robot uses a hand with two clamping jaws in which openings are provided, which openings are activated by negative pressure to open the plastic bags.

10. Method according to claim 9, wherein an intermediate stop is made during transportation of the plastic bags to steady the movement of the bags, and during the intermediate stop, the plastic bag is opened.

11. Method according to claim 1, wherein additional sample liquid is removed from the plastic bag by means of a disposable suction pipette, and the additional sample liquid is injected out onto at least one nutrient medium in a petri dish, which medium receives injections of several samples.

12. Method according to claim 11, wherein the disposable suction pipette is removed in each case by the laboratory robot from a hole magazine and, after injecting the additional sample liquid, is stripped from the robot hand over a waste opening.

13. Method according to claim 1, wherein petri dishes with fresh nutrient medium are kept in stack magazines from which the dishes are individually advanced by