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**Molecular identification and physiological characterization of yeasts, lactic acid bacteria and acetic acid bacteria isolated from heap and box cocoa bean fermentations in West Africa**

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86	<i>Lactobacillus plantarum</i>	46 75 104 107 107 100	52 36 49 38 30 82	40 47 39 89 72 46	49 30 13 100 92 71	78 47 33 91 89 49	20 22 19 21 30 26 28 23	27 16 16 15 41 18 18 21
87	<i>Lactobacillus plantarum</i>	87 91 90 107 107 100	43 30 85 36 16 95	80 36 90 93 99 90	86 71 20 104 102 90	74 74 39 101 102 70	7 14 25 12 24 14 14 14	13 4 4 26 23 12 12 12
88	<i>Lactobacillus plantarum</i>	88 91 91 107 107 101	38 15 86 48 32 86	58 74 91 72 74 31	90 88 51 101 96 35	85 88 61 99 96 84	3 5 15 5 31 29 30 36	3 1 2 8 35 24 24 32
89	<i>Lactobacillus plantarum</i>	84 88 89 107 107 101	61 43 98 46 45 97	29 26 89 98 99 91	84 59 13 104 103 43	96 93 74 104 106 83	22 24 39 35 38 43 44 46	21 18 20 34 39 37 37 44
90	<i>Lactobacillus plantarum</i>	88 93 92 106 106 100	55 49 81 56 52 98	74 51 91 96 96 89	88 83 13 102 102 100	89 90 74 101 103 97	26 33 24 11 79 48 51 49	24 26 31 42 78 44 44 46
91	<i>Lactobacillus plantarum</i>	90 92 92 106 106 100	61 53 90 50 38 98	80 78 91 89 89 82	90 89 86 102 102 98	86 91 89 100 102 72	54 38 51 40 67 33 36 38	59 35 37 44 58 33 33 31
92	<i>Lactobacillus plantarum</i>	89 91 91 107 108 90	56 40 90 41 16 69	60 57 91 72 51 12	90 90 84 107 107 75	86 91 64 107 113 108	38 24 37 32 15 14 13 15	38 23 22 25 14 11 11 15
93	<i>Lactobacillus plantarum</i>	90 80 81 106 107 99	45 18 49 43 42 91	9 8 90 94 92 67	93 91 37 100 99 91	91 98 98 98 97 88	2 5 16 5 40 34 33 39	1 11 8 9 36 34 34 40
94	<i>Lactobacillus plantarum</i>	89 92 91 106 106 100	50 45 68 52 49 96	46 24 91 96 95 70	90 88 39 102 101 98	86 82 79 101 102 98	31 25 34 35 62 46 46 48	28 28 32 33 58 42 42 43
95	<i>Lactobacillus plantarum</i>	88 91 91 106 106 99	62 49 89 56 46 97	67 63 91 93 91 69	89 88 84 102 101 99	85 90 84 99 102 93	45 35 44 29 70 45 44 51	45 35 30 36 66 46 46 40
96	<i>Lactobacillus plantarum</i>	89 91 92 106 107 101	48 33 89 44 32 96	43 30 91 91 90 55	89 89 80 101 102 98	85 90 91 99 101 100	30 19 27 21 58 28 27 29	30 14 19 25 51 24 24 31
97	<i>Lactobacillus plantarum</i>	90 90 92 107 107 100	56 47 90 44 32 96	74 69 91 95 95 65	90 85 85 101 98 87	83 91 92 98 100 93	51 33 43 36 50 27 24 29	53 30 24 36 41 25 25 27
98	<i>Lactobacillus plantarum</i>	89 90 89 106 106 100	38 25 89 49 45 99	59 39 91 91 92 85	90 90 81 102 97 99	87 90 90 97 102 101	24 11 26 15 77 42 44 44	30 9 17 17 76 42 42 42
99	<i>Lactobacillus plantarum</i>	89 92 92 106 106 100	53 46 91 42 32 95	75 66 91 90 90 79	90 90 87 99 96 96	86 91 92 94 100 75	54 33 41 34 56 23 33 35	61 30 33 37 76 31 31 26
100	<i>Lactobacillus plantarum</i>	88 87 86 106 106 101	40 14 90 43 42 99	34 21 91 89 90 73	91 91 61 102 102 100	87 90 87 94 102 101	3 4 12 4 76 38 36 40	5 11 5 6 74 35 35 36
101	<i>Lactobacillus rhamnosus</i>	77 83 1 106 107 99	26 39 72 35 26 98	14 3 2 90 94 80	96 98 60 102 102 98	98 97 59 100 101 98	77 35 3 5 57 20 27 22	12 2 5 2 72 19 19 23
102	<i>Lactobacillus rhamnosus</i>	83 102 39 106 106 100	24 30 62 49 45 100	17 10 2 91 88 79	80 76 25 102 102 100	72 90 41 100 102 101	83 33 3 5 83 43 44 42	14 2 6 6 87 44 44 42
103	<i>Lactobacillus rhamnosus</i>	66 89 7 106 106 100	20 41 76 45 28 99	8 22 4 75 71 49	77 69 50 101 102 99	81 83 54 100 103 73	66 21 2 5 60 24 24 26	13 2 4 3 73 23 23 18
104	<i>Lactobacillus rhamnosus</i>	82 97 8 106 106 101	20 56 89 46 34 100	16 34 2 86 87 69	86 79 59 102 102 101	78 87 54 101 103 101	82 17 8 5 73 31 30 31	25 3 5 3 83 29 29 31
105	<i>Leuconostoc pseudomesenteroides</i>	74 93 145 106 107 94	19 47 62 37 15 99	57 50 19 84 97 57	110 76 38 105 105 94	88 97 115 102 104 96	74 3 21 7 36 12 13 13	11 5 26 37 39 10 10 13