**Table S1:** List of the 217 groundnut accessions that were used in this study.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sn** | **Accession Name** | **Region** | **District** | **Agro-Ecological Zone** |
| 1 | GH 9850 | Bono East | Pru | Transition Zone |
| 2 | GH 9851 | Bono East | Pru | Transition Zone |
| 3 | GH 9852 | Bono East | Pru | Transition Zone |
| 4 | GH 9853 | Bono East | Pru | Transition Zone |
| 5 | GH 9854 | Bono East | Pru | Transition Zone |
| 6 | GH 9855 | Bono East | Pru | Transition Zone |
| 7 | GH 9856 | Bono East | Pru | Transition Zone |
| 8 | GH 9857 | Bono East | Pru | Transition Zone |
| 9 | GH 9858 | Bono East | Pru | Transition Zone |
| 10 | GH 9859 | Bono East | Pru | Transition Zone |
| 11 | GH 9681 | North East | West Mamprusi | Guinea Savanna |
| 12 | GH 9866 | North East | West Mamprusi | Guinea Savanna |
| 13 | GH 9672 | Northern | Tolon | Guinea Savanna |
| 14 | GH 9673 | Northern | Tolon | Guinea Savanna |
| 15 | GH 9675 | Northern | Mion | Guinea Savanna |
| 16 | GH 9678 | Northern | Mion | Guinea Savanna |
| 17 | GH 9679 | Northern | Mion | Guinea Savanna |
| 18 | GH 9680 | Northern | Mion | Guinea Savanna |
| 19 | GH 9684 | Northern | Mion | Guinea Savanna |
| 20 | GH 9685 | Northern | Tolon | Guinea Savanna |
| 21 | GH 9686 | Northern | Tolon | Guinea Savanna |
| 22 | GH 9687 | Northern | Tolon | Guinea Savanna |
| 23 | GH 9688 | Northern | Tolon | Guinea Savanna |
| 24 | GH 9689 | Northern | Tolon | Guinea Savanna |
| 25 | GH 9690 | Northern | Tolon | Guinea Savanna |
| 26 | GH 9691 | Northern | Tolon | Guinea Savanna |
| 27 | GH 9692 | Northern | Tolon | Guinea Savanna |
| 28 | GH 9693 | Northern | Tolon | Guinea Savanna |
| 29 | GH 9694 | Northern | Tolon | Guinea Savanna |
| 30 | GH 9721 | Northern | Tatale | Guinea Savanna |
| 31 | GH 9722 | Northern | Savalugu | Guinea Savanna |
| 32 | GH 9723 | Northern | Tatale | Guinea Savanna |
| 33 | GH 9724 | Northern | Tatale | Guinea Savanna |
| 34 | GH 9725 | Northern | Savalugu | Guinea Savanna |
| 35 | GH 9726 | Northern | Savalugu | Guinea Savanna |
| 36 | GH 9727 | Northern | Savalugu | Guinea Savanna |
| 37 | GH 9728 | Northern | Savalugu | Guinea Savanna |
| 38 | GH 9729 | Northern | Savalugu | Guinea Savanna |
| 39 | GH 9730 | Northern | Savalugu | Guinea Savanna |
| 40 | GH 9731 | Northern | Tatale | Guinea Savanna |
| 41 | GH 9732 | Northern | Tatale | Guinea Savanna |
| 42 | GH 9733 | Northern | Tatale | Guinea Savanna |
| 43 | GH 9734 | Northern | Tatale | Guinea Savanna |
| 44 | GH 9735 | Northern | Tatale | Guinea Savanna |
| 45 | GH 9736 | Northern | Tatale | Guinea Savanna |
| 46 | GH 9763 | Northern | Mion | Guinea Savanna |
| 47 | GH 9766 | Northern | Tolon | Guinea Savanna |
| 48 | GH 9767 | Northern | Tolon | Guinea Savanna |
| 49 | GH 9768 | Northern | Tolon | Guinea Savanna |
| 50 | GH 9769 | Northern | Tolon | Guinea Savanna |
| 51 | GH 9770 | Northern | Tolon | Guinea Savanna |
| 52 | GH 9771 | Northern | Tolon | Guinea Savanna |
| 53 | GH 9772 | Northern | Tolon | Guinea Savanna |
| 54 | GH 9774 | Northern | Tolon | Guinea Savanna |
| 55 | GH 9775 | Northern | Kumbungu | Guinea Savanna |
| 56 | GH 9776 | Northern | Tolon | Guinea Savanna |
| 57 | GH 9777 | Northern | Tolon | Guinea Savanna |
| 58 | GH 9778 | Northern | Kumbungu | Guinea Savanna |
| 59 | GH 9779 | Northern | Kumbungu | Guinea Savanna |
| 60 | GH 9780 | Northern | Sagnarigu | Guinea Savanna |
| 61 | GH 9781 | Northern | Sagnarigu | Guinea Savanna |
| 62 | GH 9783 | Northern | Tolon | Guinea Savanna |
| 63 | GH 9784 | Northern | Tolon | Guinea Savanna |
| 64 | GH 9785 | Northern | Tolon | Guinea Savanna |
| 65 | GH 9786 | Northern | Tolon | Guinea Savanna |
| 66 | GH 9787 | Northern | Tolon | Guinea Savanna |
| 67 | GH 9788 | Northern | Tolon | Guinea Savanna |
| 68 | GH 9789 | Northern | Tolon | Guinea Savanna |
| 69 | GH 9790 | Northern | Tolon | Guinea Savanna |
| 70 | GH 9791 | Northern | Tolon | Guinea Savanna |
| 71 | GH 9792 | Northern | Tolon | Guinea Savanna |
| 72 | GH 9826 | Northern | Kariga | Guinea Savanna |
| 73 | GH 9827 | Northern | Kariga | Guinea Savanna |
| 74 | GH 9828 | Northern | Kariga | Guinea Savanna |
| 75 | GH 9829 | Northern | Kariga | Guinea Savanna |
| 76 | GH 9830 | Northern | Kariga | Guinea Savanna |
| 77 | GH 9831 | Northern | Kariga | Guinea Savanna |
| 78 | GH 9832 | Northern | Kariga | Guinea Savanna |
| 79 | GH 9833 | Northern | Kariga | Guinea Savanna |
| 80 | GH 9834 | Northern | Kariga | Guinea Savanna |
| 81 | GH 9835 | Northern | Kariga | Guinea Savanna |
| 82 | GH 9837 | Northern | Kariga | Guinea Savanna |
| 83 | GH 9838 | Northern | Kariga | Guinea Savanna |
| 84 | GH 9839 | Northern | Kariga | Guinea Savanna |
| 85 | GH 9840 | Northern | Kariga | Guinea Savanna |
| 86 | GH 9841 | Northern | Kariga | Guinea Savanna |
| 87 | GH 9669 | Savanna | Bole | Guinea Savanna |
| 88 | GH 9670 | Savanna | Central Gonja | Guinea Savanna |
| 89 | GH 9671 | Savanna | Central Gonja | Guinea Savanna |
| 90 | GH 9674 | Savanna | West Gonja | Guinea Savanna |
| 91 | GH 9676 | Savanna | Bole | Guinea Savanna |
| 92 | GH 9677 | Savanna | Bole | Guinea Savanna |
| 93 | GH 9682 | Savanna | Kpalbe | Guinea Savanna |
| 94 | GH 9683 | Savanna | Kpalbe | Guinea Savanna |
| 95 | GH 9757 | Savanna | Mion | Guinea Savanna |
| 96 | GH 9758 | Savanna | West Gonja | Guinea Savanna |
| 97 | GH 9659 | Upper East | Kassena-Nankana | Guinea Savanna |
| 98 | GH 9660 | Upper East | Bolgatanga East | Guinea Savanna |
| 99 | GH 9661 | Upper East | Bongo | Guinea Savanna |
| 100 | GH 9662 | Upper East | Kassena-Nankana | Guinea Savanna |
| 101 | GH 9663 | Upper East | Builsa North | Guinea Savanna |
| 102 | GH 9665 | Upper East | Kassena-Nankana | Guinea Savanna |
| 103 | GH 9667 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 104 | GH 9668 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 105 | GH 9701 | Upper East | Bongo | Guinea Savanna |
| 106 | GH 9703 | Upper East | Bolgatanga | Guinea Savanna |
| 107 | GH 9710 | Upper East | Kassena-Nankana | Guinea Savanna |
| 108 | GH 9711 | Upper East | Kassena-Nankana | Guinea Savanna |
| 109 | GH 9712 | Upper East | Kassena-Nankana | Guinea Savanna |
| 110 | GH 9713 | Upper East | Kassena-Nankana | Guinea Savanna |
| 111 | GH 9714 | Upper East | Builsa North | Guinea Savanna |
| 112 | GH 9715 | Upper East | Builsa North | Guinea Savanna |
| 113 | GH 9716 | Upper East | Kassena-Nankana | Guinea Savanna |
| 114 | GH 9717 | Upper East | Kassena-Nankana | Guinea Savanna |
| 115 | GH 9718 | Upper East | Kassena-Nankana | Guinea Savanna |
| 116 | GH 9719 | Upper East | Kassena-Nankana | Guinea Savanna |
| 117 | GH 9720 | Upper East | Kassena-Nankana | Guinea Savanna |
| 118 | GH 9737 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 119 | GH 9738 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 120 | GH 9740 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 121 | GH 9741 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 122 | GH 9742 | Upper East | Bongo | Guinea Savanna |
| 123 | GH 9743 | Upper East | Bongo | Guinea Savanna |
| 124 | GH 9744 | Upper East | Bongo | Guinea Savanna |
| 125 | GH 9746B | Upper East | Kassena-Nankana West | Guinea Savanna |
| 126 | GH 9747 | Upper East | Bolgatanga | Guinea Savanna |
| 127 | GH 9748 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 128 | GH 9749 | Upper East | Kassena-Nankana West | Guinea Savanna |
| 129 | GH 9750 | Upper East | Bolgatanga | Guinea Savanna |
| 130 | GH 9751 | Upper East | Bolgatanga | Guinea Savanna |
| 131 | GH 9752 | Upper East | Builsa North | Guinea Savanna |
| 132 | GH 9753 | Upper East | Bolgatanga | Guinea Savanna |
| 133 | GH 9754 | Upper East | Builsa North | Guinea Savanna |
| 134 | GH 9755 | Upper East | Bolgatanga | Guinea Savanna |
| 135 | GH 9756 | Upper East | Builsa North | Guinea Savanna |
| 136 | GH 9759 | Upper East | Bongo | Guinea Savanna |
| 137 | GH 9760 | Upper East | Bongo | Guinea Savanna |
| 138 | GH 9761 | Upper East | Bongo | Guinea Savanna |
| 139 | GH 9762 | Upper East | Bongo | Guinea Savanna |
| 140 | GH 9865 | Upper East | Bolgatanga East | Guinea Savanna |
| 141 | GH 9658 | Upper West | Sissalla East | Guinea Savanna |
| 142 | GH 9664 | Upper West | Jirapa | Guinea Savanna |
| 143 | GH 9666 | Upper West | Lawra | Guinea Savanna |
| 144 | GH 9695A | Upper West | Sissalla East | Guinea Savanna |
| 145 | GH 9697 | Upper West | Nandom | Guinea Savanna |
| 146 | GH 9698 | Upper West | Lawra | Guinea Savanna |
| 147 | GH 9699 | Upper West | Lawra | Guinea Savanna |
| 148 | GH 9700 | Upper West | Lawra | Guinea Savanna |
| 149 | GH 9702 | Upper West | Sissalla West | Guinea Savanna |
| 150 | GH 9704 | Upper West | Lawra | Guinea Savanna |
| 151 | GH 9705 | Upper West | Nandom | Guinea Savanna |
| 152 | GH 9706 | Upper West | Nandom | Guinea Savanna |
| 153 | GH 9707 | Upper West | Lawra | Guinea Savanna |
| 154 | GH 9709 | Upper West | Nandom | Guinea Savanna |
| 155 | GH 9745 | Upper West | Jirapa | Guinea Savanna |
| 156 | GH 9842 | Upper West | Lawra | Guinea Savanna |
| 157 | GH 9843 | Upper West | Lawra | Guinea Savanna |
| 158 | GH 9844 | Upper West | Lawra | Guinea Savanna |
| 159 | GH 9845 | Upper West | Lawra | Guinea Savanna |
| 160 | GH 9846 | Upper West | Lawra | Guinea Savanna |
| 161 | GH 9847 | Upper West | Lawra | Guinea Savanna |
| 162 | GH 9848 | Upper West | Lawra | Guinea Savanna |
| 163 | GH 9849 | Upper West | Lawra | Guinea Savanna |
| 164 | GH 9860 | Upper West | Kaleo Nadowli | Guinea Savanna |
| 165 | GH 9861 | Upper West | Kaleo Nadowli | Guinea Savanna |
| 166 | GH 9862 | Upper West | Kaleo Nadowli | Guinea Savanna |
| 167 | GH 9863 | Upper West | Kaleo Nadowli | Guinea Savanna |
| 168 | GH 9864 | Upper West | Bolgatanga East | Guinea Savanna |
| 169 | GH 9696 | Upper East | Bolgatanga East | Guinea Savanna |
| 170 | GH 9765 | Northern | Sagnarigu | Guinea Savanna |
| 171 | GH 9695B | Upper West | Sissalla East | Guinea Savanna |
| 172 | GH 1946A | Northern | Tolon | Guinea Savanna |
| 173 | GH 9810 | Northern | Ho | Semi-Decidious Forest |
| 174 | GH 9793 | Volta | Ho | Semi-Decidious Forest |
| 175 | GH 9794 | Volta | Ho | Semi-Decidious Forest |
| 176 | GH 9795 | Volta | Ho | Semi-Decidious Forest |
| 177 | GH 9796 | Volta | Akatsi South | Semi-Decidious Forest |
| 178 | GH 9797 | Volta | Ho | Semi-Decidious Forest |
| 179 | GH 9798 | Volta | Ho | Semi-Decidious Forest |
| 180 | GH 9799 | Volta | Ho | Semi-Decidious Forest |
| 181 | GH 9800 | Volta | Ho | Semi-Decidious Forest |
| 182 | GH 9801 | Volta | Ho | Semi-Decidious Forest |
| 183 | GH 9802 | Volta | Akatsi South | Semi-Decidious Forest |
| 184 | GH 9803 | Volta | Ho | Semi-Decidious Forest |
| 185 | GH 9804 | Volta | Ho | Semi-Decidious Forest |
| 186 | GH 9805 | Volta | Ho | Semi-Decidious Forest |
| 187 | GH 9806 | Volta | Ho | Semi-Decidious Forest |
| 188 | GH 9807 | Volta | Ho | Semi-Decidious Forest |
| 189 | GH 9808 | Volta | Ho | Semi-Decidious Forest |
| 190 | GH 9809 | Volta | Akatsi South | Semi-Decidious Forest |
| 191 | GH 9810A | Volta | Ho | Semi-Decidious Forest |
| 192 | GH 9811 | Volta | Ho | Semi-Decidious Forest |
| 193 | GH 9812 | Volta | Ho | Semi-Decidious Forest |
| 194 | GH 9813 | Volta | Ho | Semi-Decidious Forest |
| 195 | GH 9814 | Volta | Akatsi South | Semi-Decidious Forest |
| 196 | GH 9817 | Volta | Akatsi South | Semi-Decidious Forest |
| 197 | GH 9818 | Volta | Ho | Semi-Decidious Forest |
| 198 | GH 9819 | Volta | Akatsi South | Semi-Decidious Forest |
| 199 | GH 9820 | Volta | Ho | Semi-Decidious Forest |
| 200 | GH 9821 | Volta | Ho | Semi-Decidious Forest |
| 201 | GH 9822 | Volta | Ho | Semi-Decidious Forest |
| 202 | GH 9823 | Volta | Ho | Semi-Decidious Forest |
| 203 | GH 9824 | Volta | Ho | Semi-Decidious Forest |
| 204 | GH 9825 | Volta | Ho | Semi-Decidious Forest |
|  | **Checks** |  |  |  |
| 205 | GH 9563 |  |  |  |
| 206 | GH 9758 |  |  |  |
| 207 | GH 9559 |  |  |  |
| 208 | GH 9554 |  |  |  |
| 209 | GH 9556 |  |  |  |
| 210 | GH 9557 |  |  |  |
| 211 | GH 9561B |  |  |  |
| 212 | GH 9564 |  |  |  |
| 215 | GH 9555 |  |  |  |
| 216 | GH 9560 |  |  |  |
| 217 | GH 9562 |  |  |  |
| 217 | GH 9561A |  |  |  |
| 218 | GH 9559A |  |  |  |