

No.

201100008



# THE UNITED STATES OF AMERICA

**TO ALL TO WHOM THESE PRESENTS SHALL COME;**

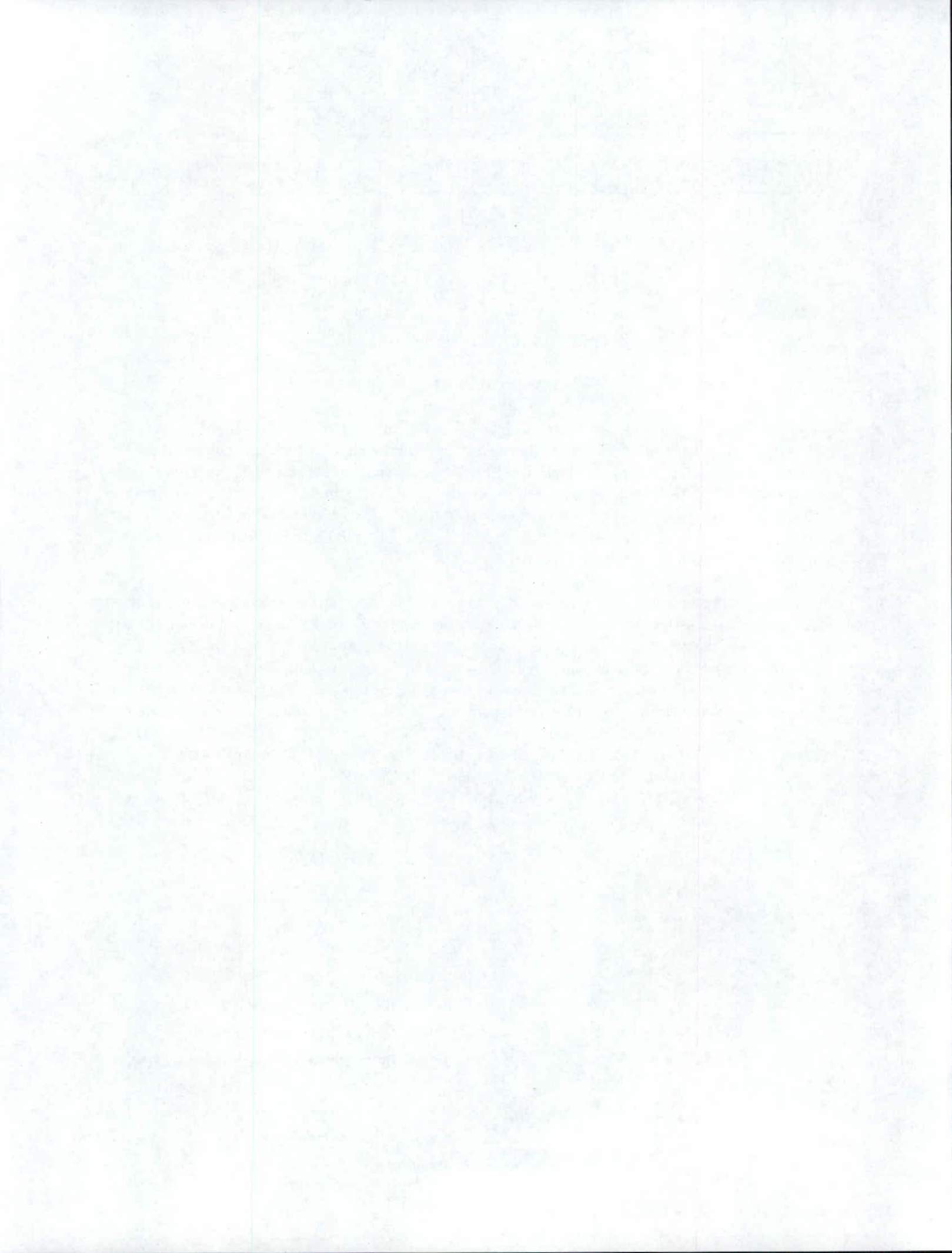
## University of Idaho

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

An application requesting a certificate of protection for an alleged distinct variety of sexually reproduced, or tuber propagated plant, the name and description of which are contained in the application and exhibits, a copy of which is hereunto annexed and made a part hereof, and the various requirements of LAW in such cases made and provided have been complied with, and the title thereto is, from the records of the PLANT VARIETY PROTECTION OFFICE, in the applicant(s) indicated in the said copy, and Whereas, upon due examination made, the said applicant(s) is (are) adjudged to be entitled to a certificate of plant variety protection under the LAW.

Now, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of TWENTY years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by LAW, the right to exclude others from selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or conditioning it for propagation, or stocking it for any of the above purposes, or using it in producing a hybrid or different variety therefrom, to the extent provided by the PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A TYPE OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF SEEDS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 1581-1583, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3244, 3245, 3246, 3247, 3248, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3292, 3293, 3294, 3295, 3296, 3297, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3308, 3309, 3310, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3325, 3326, 3327, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3336, 3337, 3338, 3339, 3340, 3341, 3342, 3343, 3344, 3345, 3346, 3347, 3348, 3349, 3350, 3351, 3352, 3353, 3354, 3355, 3356, 3357, 3358, 3359, 3360, 3361, 3362, 3363, 3364, 3365, 3366, 3367, 3368, 3369, 3370, 3371, 3372, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3383, 3384, 3385, 3386, 3387, 3388, 3389, 3390, 3391, 3392, 3393, 3394, 3395, 3396, 3397, 3398, 3399, 3400, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3418, 3419, 3420, 3421, 3422, 3423, 3424, 3425, 3426, 3427, 3428, 3429, 3430, 3431, 3432, 3433, 3434, 3435, 3436, 3437, 3438, 3439, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450, 3451, 3452, 3453, 3454, 3455, 3456, 3457, 3458, 3459, 3460, 3461, 3462, 3463, 3464, 3465, 3466, 3467, 3468, 3469, 3470, 3471, 3472, 3473, 3474, 3475, 3476, 3477, 3478, 3479, 3480, 3481, 3482, 3483, 3484, 3485, 3486, 3487, 3488, 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, 3498, 3499, 3500, 3501, 3502, 3503, 3504, 3505, 3506, 3507, 3508, 3509, 3510, 3511, 3512, 3513, 3514, 3515, 3516, 3517, 3518,



U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
 (Instructions and information collection burden statement on reverse)

1. NAME OF OWNER University of Idaho		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME ID99-435	3. VARIETY NAME UICF-Lambert
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Morrill Hall 414 P.O. Box 443003 Moscow, Idaho 83844-3003		5. TELEPHONE (include area code) 208-885-4550	FOR OFFICIAL USE ONLY PVPO NUMBER <b>#201100008</b> FILING DATE <b>OCTOBER 6, 2010</b>
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) University - research land grant institution		6. FAX (include area code) 208-885-4551	
8. IF INCORPORATED, GIVE STATE OF INCORPORATION		9. DATE OF INCORPORATION	

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Gaylene Anderson, Office of Technology Transfer, Morrill Hall 414, P.O. Box 443003, Moscow, ID 83844-3003 Robert S. Zemetra, Dept. of Plant, Soil and Entomological Sciences, Ag Biotech 111, P.O. Box 442339, University of Idaho, Moscow, ID 83844-2339		FILING AND EXAMINATION FEES: \$ <b>4,382.00</b> DATE <b>9/6/10</b> CERTIFICATION FEE: \$ <b>768.00</b> DATE <b>12/1/10</b>
---	--	---

11. TELEPHONE (Include area code) 208,885-4550, 208-885-7810	12. FAX (Include area code) 208-885-4551, 208-885-7760	13. E-MAIL gaylene@uidaho.edu, rzemetra@uidaho.edu
14. CROP KIND (Common Name) soft white winter wheat	16. FAMILY NAME (Botanical) Triticeae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
15. GENUS AND SPECIES NAME OF CROP Triticum aestivum	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input checked="" type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		<input checked="" type="radio"/> YES (If "yes", answer items 21 and 22 below) <input type="radio"/> NO (If "no", go to item 23) <input type="radio"/> UNDECIDED
		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
		IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED
		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
		IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)

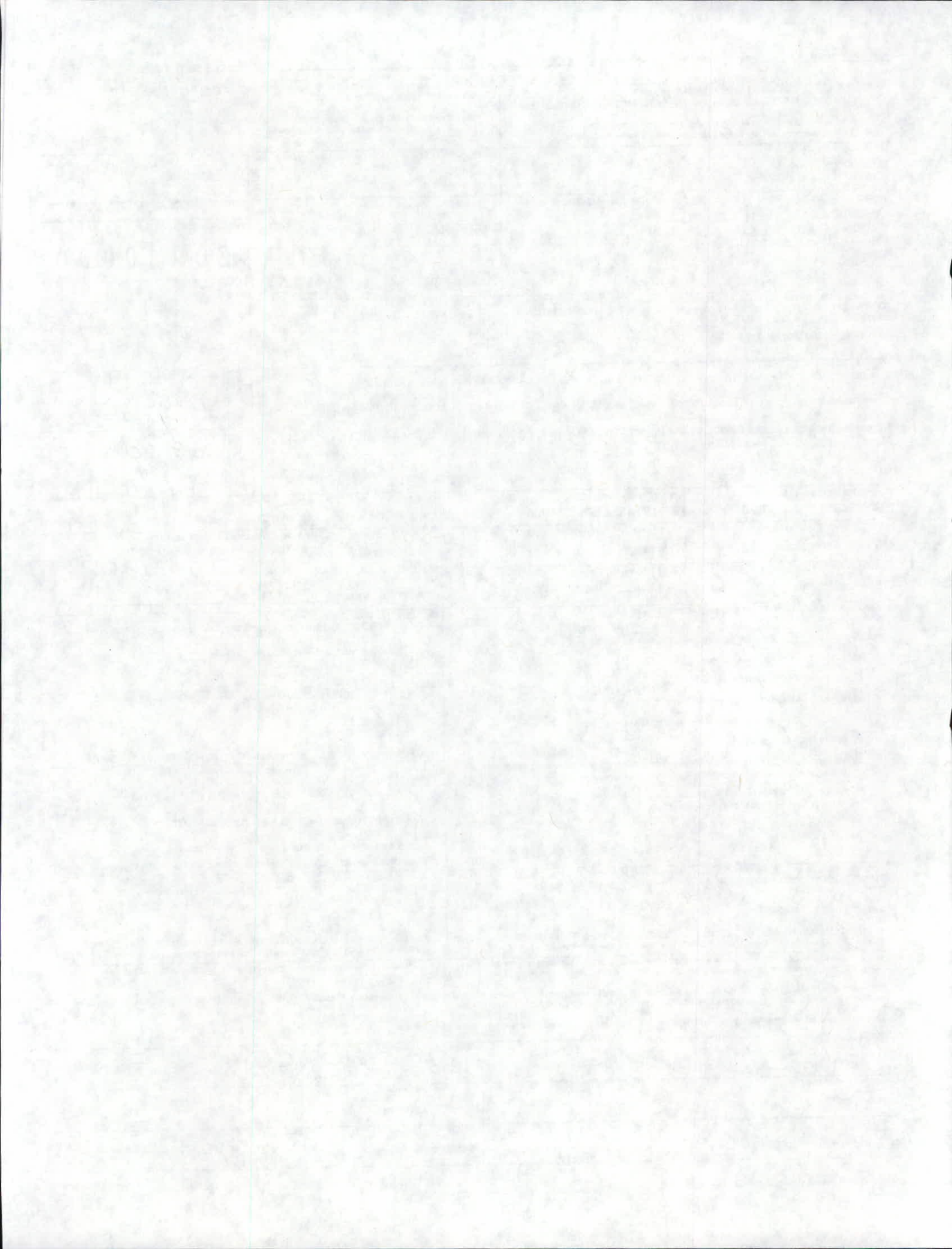
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)	

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER 	
NAME (Please print or type) Gaylene Anderson		NAME (Please print or type) Robert S. Zemetra	
CAPACITY OR TITLE LICENSING ASSOCIATE	DATE 10/5/10	CAPACITY OR TITLE Professor	DATE 10/5/10



**GENERAL INSTRUCTIONS:** To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the *Regulations and Rules of Practice*). **NEW:** With the application for a seed reproduced variety **or by direct deposit soon after filing**, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initiated and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the *Regulations and Rules of Practice*.)

**Plant Variety Protection Office**  
**Telephone:** (301) 504-5518      **FAX:** (301) 504-5291  
**General E-mail:** PVPOmail@usda.gov  
**Homepage:** <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

#### SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. <http://www.ams.usda.gov/lsg/seed.htm>.

#### ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
  - (2) the details of subsequent stages of selection and multiplication;
  - (3) evidence of uniformity and stability; and
  - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
  - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

**22. CONTINUED FROM FRONT** (Please provide a statement as to the limitation and sequence of generations that may be certified.)

**23. CONTINUED FROM FRONT** (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances; if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)  
 October 21, 2009 United States, foundation seed sale

**24. CONTINUED FROM FRONT** (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



## EXHIBIT A: ORIGIN AND BREEDING HISTORY OF UICF-LAMBERT

UICF-Lambert originated from a third generation backcross involving FS4 and Lambert as the recurrent parent. UICF-Lambert's pedigree is 'Madsen\*4/FS4//4\*Lambert. FS4 is a selection from the French wheat cultivar 'Fidel' that was mutagenized with sodium azide then selected for tolerance to imazethapyr (Tan et al. 2005). To transfer the herbicide resistance in to a soft white winter wheat background FS4, which carried the gene *Imi-1* (also known as *Als-1*) that confers resistance to imazamox, was backcrossed to the cultivar Madsen (Allan et al. 1989) by Texas A&M University under contract to American Cyanamid now owned by BASF. Lambert is a soft white common winter wheat released jointly by the Idaho Agricultural Experiment Station, the Oregon Agricultural Experiment Station and Washington Agricultural Experiment Station (Zemetra et al. 1995). The original cross for UICF-Lambert was made in 1999. The F<sub>1</sub> plants were screened in the greenhouse with imazamox and survivors were backcrossed to Lambert. This cycle was repeated two more times and then the survivors were allowed to self. Progeny from the selfed plants were screened for imazamox resistance and lines that were homozygous for resistance were harvested for field evaluation. The line 99-435 was screened in the field for resistance in single row replicated plots in 2003 and in 5 x 10 foot plots in 2004, 2005 and 2006. The line ID99-435 was entered into advanced yield testing in 2004 and in regional testing in 2005. While in advanced and regional testing, ID99-435 was evaluated for stripe rust resistance, height, heading date, test weight, and the end-use quality parameters percent flour protein, NIR hardness, percent flour yield, percent break flour yield, sugar snap cookie diameter and percent flour ash. ID99-345 was entered for evaluation in the Tri-State Extension cereal testing nursery in





2006 and evaluated for two years. In 2006, ID99-435 was evaluated by the Pacific Northwest Wheat Quality Council for its end-use quality and was found to have similar end-use quality as its recurrent parent Lambert. Heads were collected in 2004 and were grown during the 2004-2005 growing season at Moscow, Idaho to produce the pre-breeder seed generation. Selected head rows were harvested and planted out separately in 5 x 10 plots at the Palouse Research Extension and Education research farm in fall, 2005. All head rows and plots were treated with imazamox to insure the presence of the herbicide resistance gene in all plants. Plots showing uniformity were harvested in 2006 to produce breeder seed. The initial foundation seed generation was grown in 2006-2007 at Kimberly, Idaho.

UICF-Lambert approved for release by the Idaho Foundation Seed Stocks Committee in 2008. UICF-Lambert has been examined for uniformity and absence of segregation since it was placed in advanced line testing in 2004. It was observed to be uniform and stable over three generations of seed increase (pre-breeder – 2004, breeder – 2005, and foundation – 2006). All generations were treated with the herbicide imazamox to insure uniformity of herbicide resistance. No variants for phenotypic characteristics such as height or head morphology or herbicide resistance have been observed in foundation fields of UICF-Lambert.



## EXHIBIT B: NOVELTY STATEMENT FOR UICF-LAMBERT WHEAT

UICF-Lambert is intended for the rainfed areas of the Pacific Northwest (Idaho, Oregon and Washington) and is most similar to the soft white winter wheat cultivar Lambert. UICF-Lambert is a backcross derived line from the cultivar Lambert carrying the *Imi-1* gene for resistance. UICF-Lambert can be easily differentiated from Lambert by screening for the herbicide resistance gene *Imi-1*. This can be accomplished phenotypically through the application of the herbicide imazamox in the seedling stage.

Phenotypic differentiation of UICF-Lambert from Lambert can be accomplished by spraying the plants at the 3 to 5 leaf stage with a 1X (45 g/ha) rate of imazamox (Beyond herbicide (BASF) following label directions for herbicide application (Carter et al. 2007). Plants not carrying the *Imi-1* gene will start showing injury at 14 to 21 days and will ultimately die while plants carrying the *Imi-1* gene will survive.



According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705**

Exhibit C

**OBJECTIVE DESCRIPTION OF VARIETY  
Wheat (*Triticum* spp.)**

NAME OF APPLICANT (S) University of Idaho	TEMPORARY OR EXPERIMENTAL DESIGNATION ID99-435	VARIETY NAME UICF-Lambert
ADDRESS (Street and No. or RD No., City, State, Zip Code and Country) Morrill Hall 414 P.O. Box 443003 Moscow, Idaho 83844-3003  Enter your e-mail address: <a href="mailto:gaylene@uidaho.edu">gaylene@uidaho.edu</a>		FOR OFFICIAL USE ONLY  PVPO NUMBER  #201100008

**PLEASE READ ALL INSTRUCTIONS CAREFULLY:**

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9 ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: \_\_\_\_\_ Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND: <u>1</u>  1 = Common 2 = Durum 3 = Club 4 = Other (Specify) _____	2. VERNALIZATION: <u>2</u>  1 = Spring 2 = Winter 3 = Other (Specify) _____
---	---

3. COLEOPTILE ANTHOCYANIN: <u>1</u> 1 = Absent      2 = Present	4. JUVENILE PLANT GROWTH: <u>2</u> 1 = Prostrate      2 = Semi-Erect      3 = Erect
--	--

5. PLANT COLOR: (Boot Stage) <u>3</u>  1 = Yellow-Green 2 = Green 3 = Blue-Green	6. FLAG LEAF: (Boot Stage) <table border="0"> <tr> <td><u>1</u></td> <td>1 = Erect</td> <td>2 = Recurved</td> </tr> <tr> <td><u>2</u></td> <td>1 = Not Twisted</td> <td>2 = Twisted</td> </tr> <tr> <td><u>2</u></td> <td>1 = Wax Absent</td> <td>2 = Wax Present</td> </tr> </table>	<u>1</u>	1 = Erect	2 = Recurved	<u>2</u>	1 = Not Twisted	2 = Twisted	<u>2</u>	1 = Wax Absent	2 = Wax Present
<u>1</u>	1 = Erect	2 = Recurved								
<u>2</u>	1 = Not Twisted	2 = Twisted								
<u>2</u>	1 = Wax Absent	2 = Wax Present								

7. EAR EMERGENCE:

16 Number of Days (Average)

\_\_\_\_ Number of Days Earlier Than \* \_\_\_\_\_

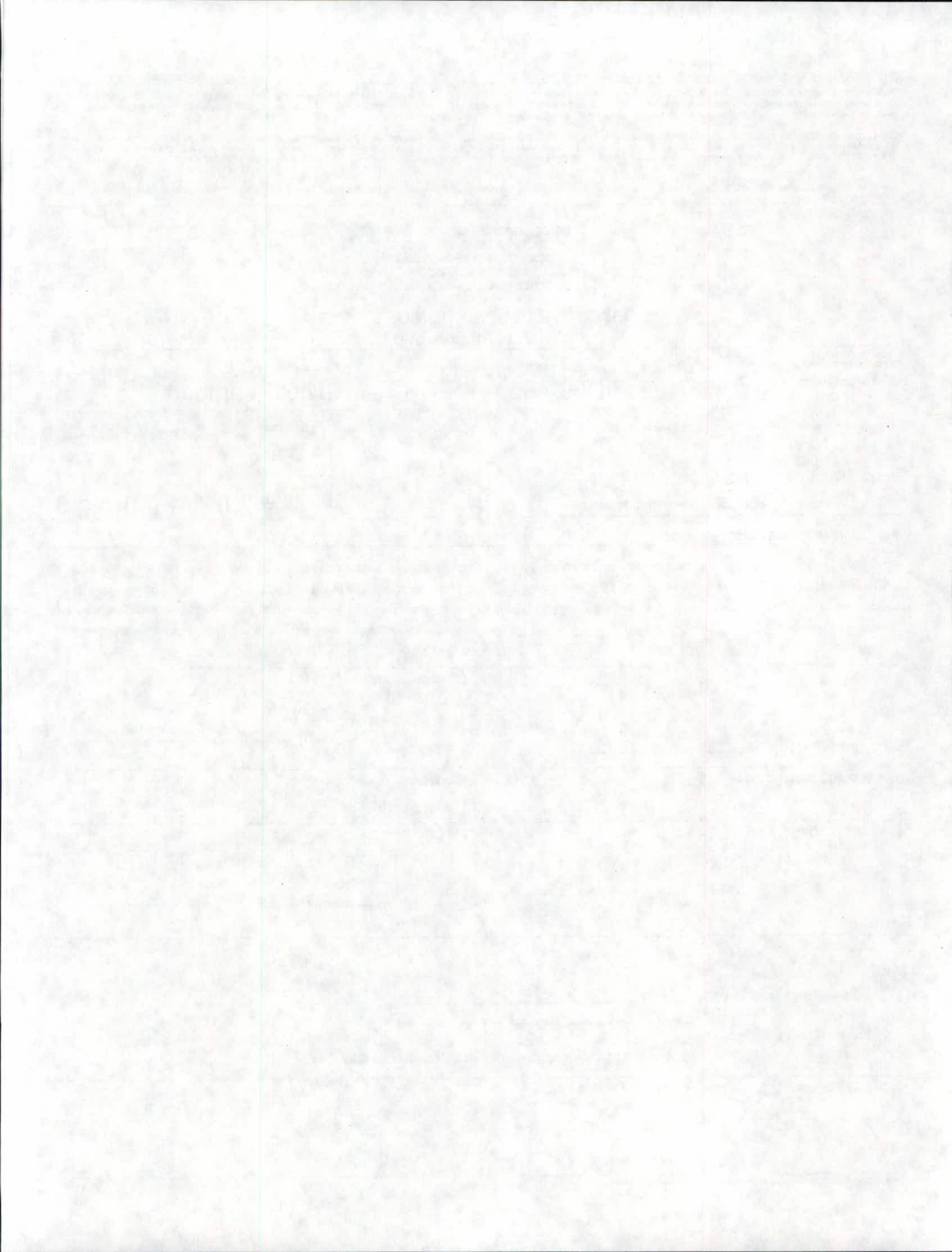
Same As \* \_\_\_\_\_

2 Number of Days Later Than \* Lambert

\*Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

8. ANTHOR COLOR: 1      1 = Yellow      2 = Purple

6



9. PLANT HEIGHT: (From Soil to Top of Head, Excluding Awns)

93 cm (Average)
3 cm Taller Than Lambert
Same As
cm Shorter Than

10. STEM:

1 A. ANTHOCYANIN 1 = Absent 2 = Present
2 B. WAXY BLOOM 1 = Absent 2 = Present
1 C. HAIRINESS (last internode of rachis) 1 = Absent 2 = Present
1 D. INTERNODE 1 = Hollow 2 = Semi-Solid 3 = Solid
4 Number of Nodes
1 E. PEDUNCLE 1 = Erect 2 = Recurved 3 = Semi-Erect
33 cm Length
F. AURICLE
1 Anthocyanin: 1 = Absent 2 = Present
2 Hair: 1 = Absent 2 = Present

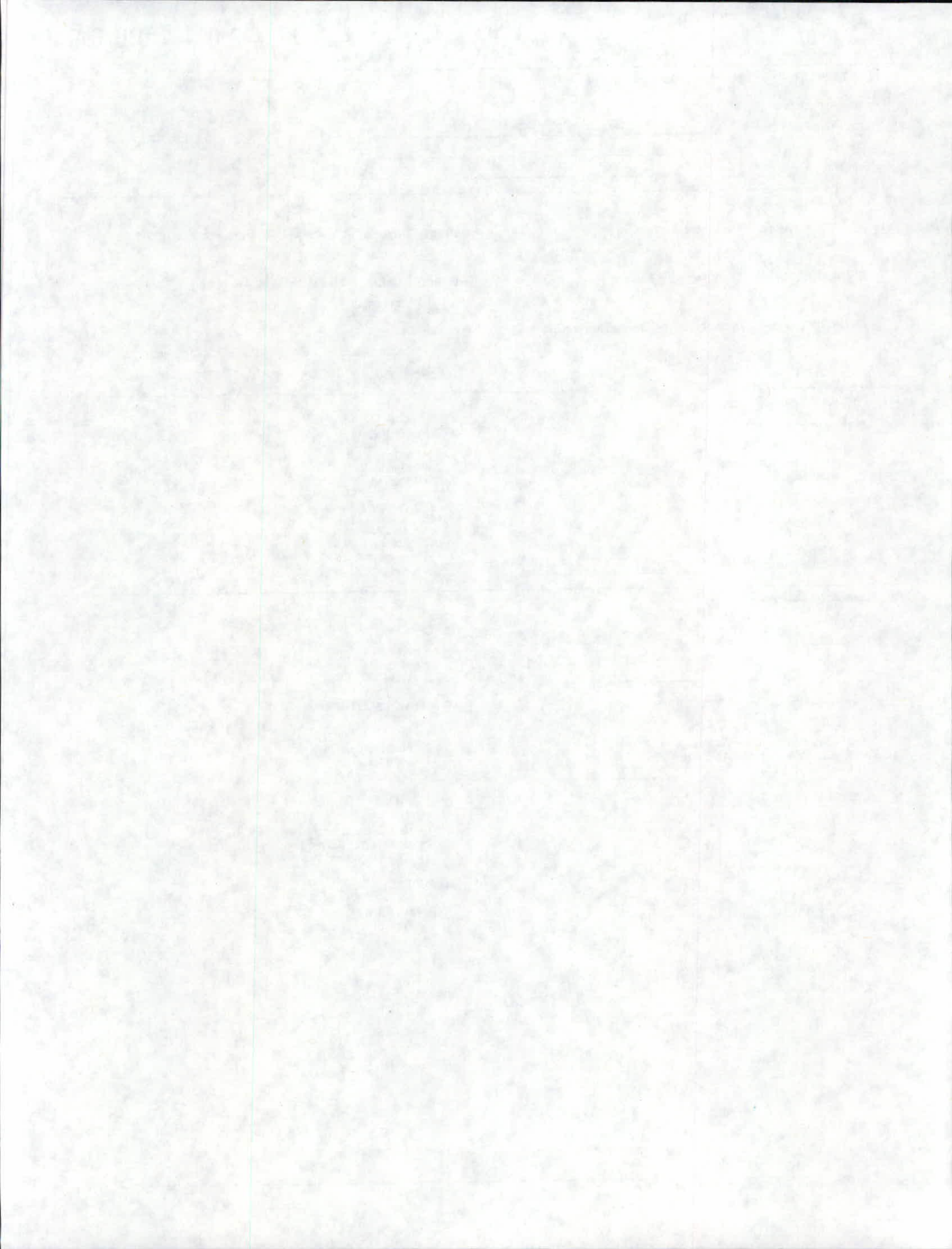
11. HEAD: (At Maturity)

2 A. DENSITY
1 = Lax
2 = Middense (Laxidense)
3 = Dense
1 B. SHAPE
1 = Tapering
2 = Strap
3 = Clavate
4 = Other (Specify)
1 C. CURVATURE
1 = Erect
2 = Inclined
3 = Recurved
4 D. AWNEDNESS
1 = Awnless
2 = Apically Awnletted
3 = Awnletted
4 = Awned

12. GLUMES: (At Maturity)

1 A. COLOR
1 = White
2 = Tan
3 = Other (Specify)
1 B. SHOULDER
1 = Wanting 2 = Oblique
3 = Rounded 4 = Square
5 = Elevated 6 = Apiculate
7 = Other (Specify)
2 C. SHOULDER WIDTH
1 = Narrow
2 = Medium
3 = Wide
3 D. BEAK
1 = Obtuse
2 = Acute
3 = Acuminate
2 E. BEAK WIDTH
1 = Narrow
2 = Medium
3 = Wide
3 F. GLUME LENGTH
1 = Short (ca. 7 mm)
2 = Medium (ca. 8 mm)
3 = Long (ca. 9 mm)
3 G. WIDTH
1 = Narrow (ca. 3 mm)
2 = Medium (ca. 3.5 mm)
3 = Wide (ca. 4 mm)
1 H. PUBESCENCE
1 = Not Present
2 = Present

7





13. SEED:

1 A. SHAPE

- 1 = Ovate
- 2 = Oval
- 3 = Elliptical

1 B. CHEEK

- 1 = Rounded
- 2 = Angular

2 C. BRUSH

- 1 = Short
- 2 = Medium
- 3 = Long

- 1 1 = Not Collared  
2 = Collared

1 D. CREASE

- 1 = Width 60% or less of Kernel
- 2 = Width 80% or less of Kernel
- 3 = Width Nearly as Wide as Kernel

2

- 1 = Depth 20% or less of Kernel
- 2 = Depth 35% or less of Kernel
- 3 = Depth 50% or less of Kernel

1 E. COLOR

- 1 = White
- 2 = Amber
- 3 = Red
- 4 = Other (Specify) \_\_\_\_\_

2 F. TEXTURE

- 1 = Hard
- 2 = Soft
- 3 = Other (Specify) \_\_\_\_\_

4 G. PHENOL REACTION

- 1 = Ivory
- 2 = Fawn
- 3 = Light Brown
- 4 = Dark Brown
- 5 = Black

52 H. SEED WEIGHT

g/1000 Seed (Whole Number Only)

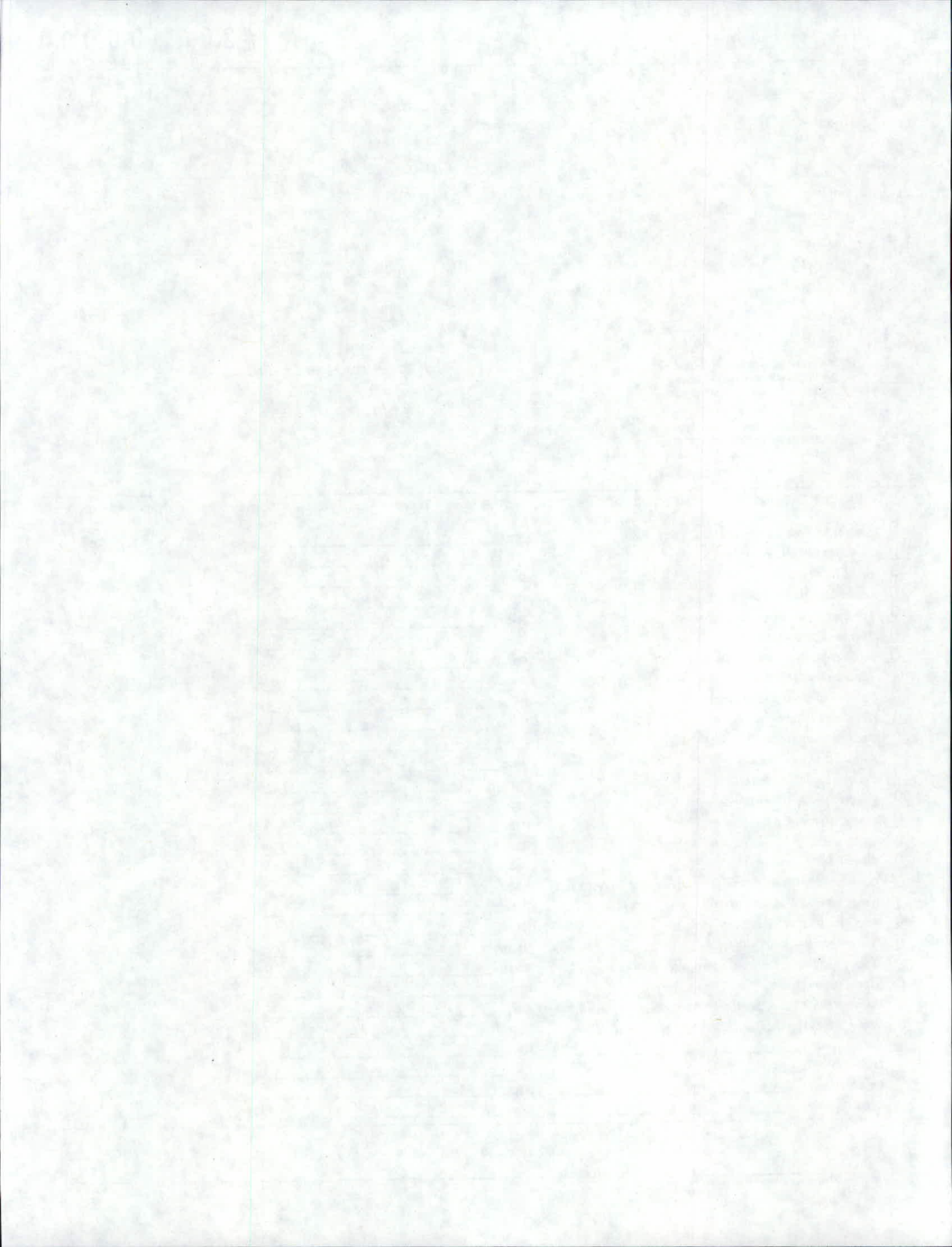
1 I. GERM SIZE

- 1 = Small
- 2 = Midsize
- 3 = Large

14. DISEASE: PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

<u>0</u> Stem Rust ( <i>Puccinia graminis</i> f. sp. <i>tritici</i> )	Race: _____
<u>0</u> Leaf Rust ( <i>Puccinia recondita</i> f. sp. <i>tritici</i> )	Race: _____
<u>3</u> Stripe Rust ( <i>Puccinia striiformis</i> )	Race: _____
<u>0</u> Loose Smut ( <i>Ustilago tritici</i> )	Race: _____
<u>0</u> Tan Spot ( <i>Pyrenophora tritici-repentis</i> )	Race: _____
<u>0</u> Flag Smut ( <i>Urocystis agropyri</i> )	Race: _____
<u>0</u> Halo Spot ( <i>Selenophoma donacis</i> )	Race: _____
<u>1</u> Common Bunt ( <i>Tilletia tritici</i> or <i>T. laevis</i> )	Race: _____
<u>0</u> <i>Septoria nodorum</i> (Glume Blotch)	Race: _____
<u>1</u> Dwarf Bunt ( <i>Tilletia controversa</i> )	Race: _____
<u>0</u> <i>Septoria avenae</i> (Speckled Leaf Disease)	Race: _____
<u>0</u> Karnal Bunt ( <i>Tilletia indica</i> )	Race: _____
<u>0</u> <i>Septoria tritici</i> (Speckled Leaf Blotch)	Race: _____
<u>0</u> Powdery Mildew ( <i>Erysiphe graminis</i> f. sp. <i>tritici</i> )	Race: _____
<u>0</u> Scab ( <i>Fusarium</i> spp.)	Race: _____
<u>3</u> "Snow Molds"	Race: _____
<u>0</u> "Black Point" (Kernel Smudge)	Race: _____
<u>0</u> Common Root Rot ( <i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.)	Race: _____
<u>1</u> Barley Yellow Dwarf Virus (BYDV)	Race: _____
<u>0</u> Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )	Race: _____
<u>0</u> Soilborne Mosaic Virus (SBMV)	Race: _____
<u>0</u> Black Chaff ( <i>Xanthomonas campestris</i> pv. <i>translucens</i> )	Race: _____
<u>0</u> Wheat Yellow (Spindle Streak) Mosaic Virus	Race: _____
<u>0</u> Bacterial Leaf Blight ( <i>Pseudomonas syringae</i> pv. <i>syringae</i> )	Race: _____
<u>0</u> Wheat Streak Mosaic Virus (WSMV)	Race: _____
Other (Specify) _____	Race: _____
Other (Specify) _____	Race: _____
Other (Specify) _____	Race: _____
Other (Specify) _____	Race: _____

8



15. HOMOZYGOUS FOR SPECIFIC DISEASE RESISTANCE GENE

Stem rust \_\_\_\_\_  
Leaf rust \_\_\_\_\_  
Other \_\_\_\_\_

16. INSECT: PLEASE SPECIFY BIOTYPE (Where Needed) (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

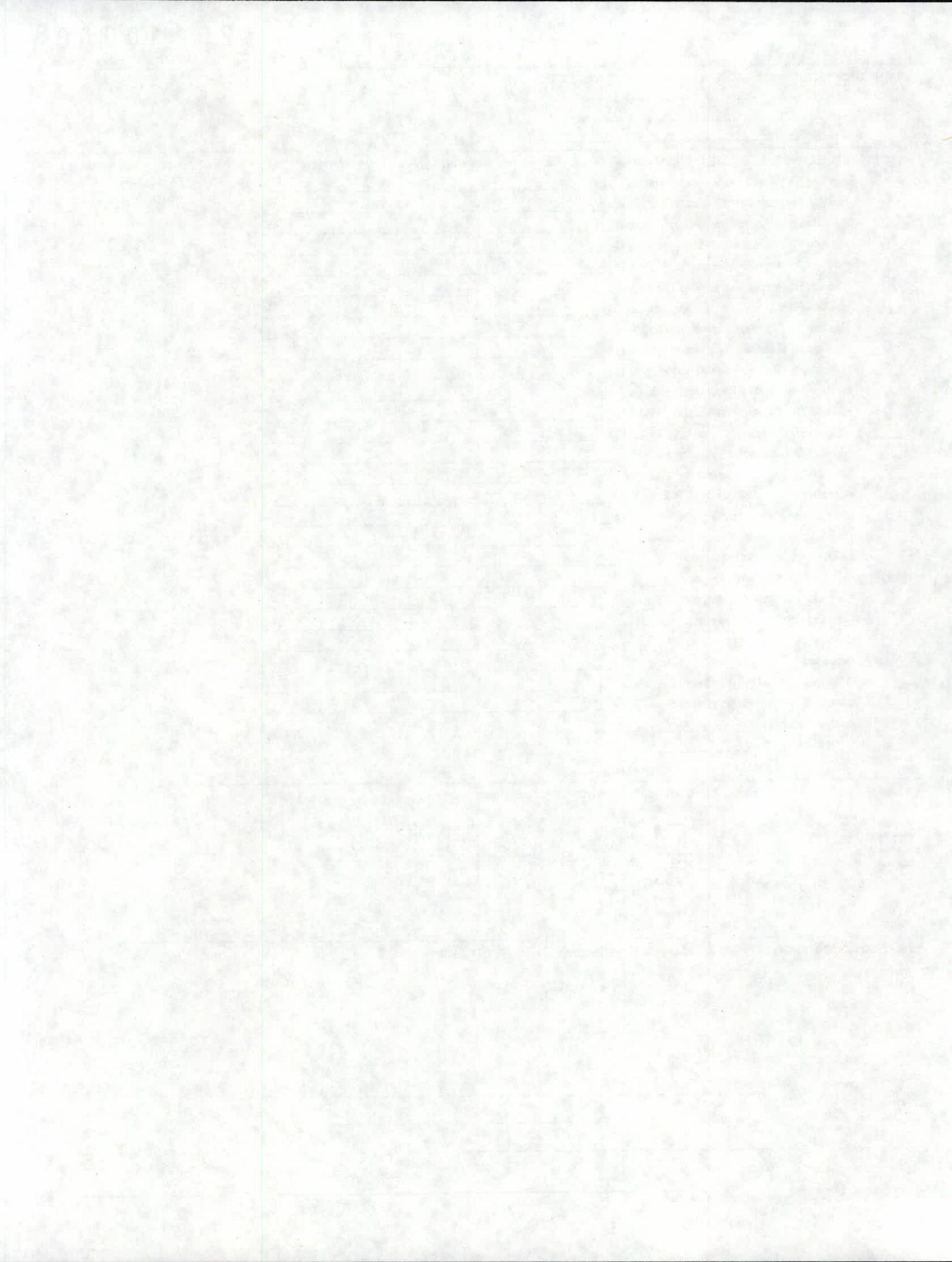
- 0 Hessian Fly (*Mayetiola destructor*) General \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype A \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype B \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype C \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype D \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype E \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype F \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype G \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype H \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype I \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype J \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype L \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype M \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype N \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) Biotype O \_\_\_\_\_
- 0 Hessian Fly (*Mayetiola destructor*) (Specify) \_\_\_\_\_
- 0 Stem Sawfly (*Cephus* spp.) (Specify) \_\_\_\_\_
- 1 Cereal Leaf Beetle (*Oulema melanopa*) (Specify) \_\_\_\_\_
- 1 Russian Aphid 1 (*Diuraphis noxia*) \_\_\_\_\_
- 1 Russian Aphid 2 (*Diuraphis noxia*) \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) (General) \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) Biotype A \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) Biotype B \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) Biotype C \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) Biotype E \_\_\_\_\_
- 0 Greenbug (*Schizaphis graminum*) Other (Specify) \_\_\_\_\_
- \_\_\_\_\_ Aphids (Specify) \_\_\_\_\_
- \_\_\_\_\_ Other (Specify) \_\_\_\_\_

17. HIGH MOLECULAR WEIGHT GLUTENIN SUBUNIT PROFILE (Check those that apply):

<input type="checkbox"/>	<u>Glu-A1</u>	<input type="checkbox"/>	<u>Glu-B1</u>	<input type="checkbox"/>	<u>Glu-D1</u>
<input type="checkbox"/>	1	<input type="checkbox"/>	6+8	<input type="checkbox"/>	2+11
<input type="checkbox"/>	2*	<input type="checkbox"/>	7+8	<input checked="" type="checkbox"/>	2+12
<input type="checkbox"/>	null	<input type="checkbox"/>	7+9	<input type="checkbox"/>	3+12
<input type="checkbox"/>	1*	<input type="checkbox"/>	13+16	<input type="checkbox"/>	5+10
		<input type="checkbox"/>	13+19	<input type="checkbox"/>	null
		<input type="checkbox"/>	17+18		

18. TRANSLOCATIONS (1=Present 2=Absent 3=Heterogeneous 4= Not Tested):

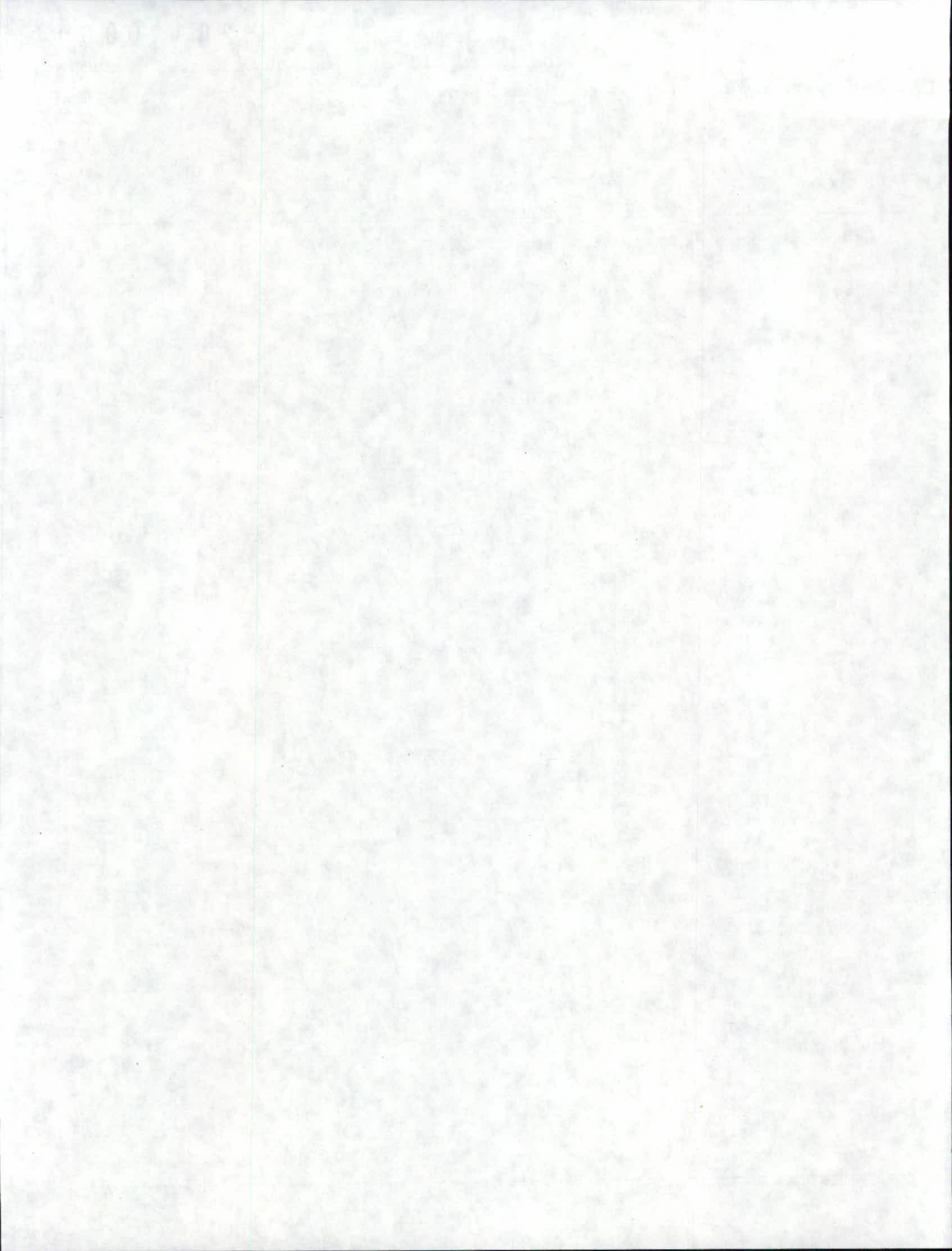
- 2 1BL/1RS
- 2 1A/1R
- 4 2NS/2AS
- 4 4DL/4AgS
- \_\_\_\_\_ OTHER (explain) \_\_\_\_\_
- \_\_\_\_\_ OTHER (explain) \_\_\_\_\_



19. IMIDAZOLINONE HERBICIDE TOLERANCE (1=Present 2=Absent 3=Not Tested):

- 1 Als-1
- 2 Als-2
- 2 Als-3

20. ADDITIONAL INFORMATION ON ANY ITEM ABOVE OR GENERAL COMMENTS:

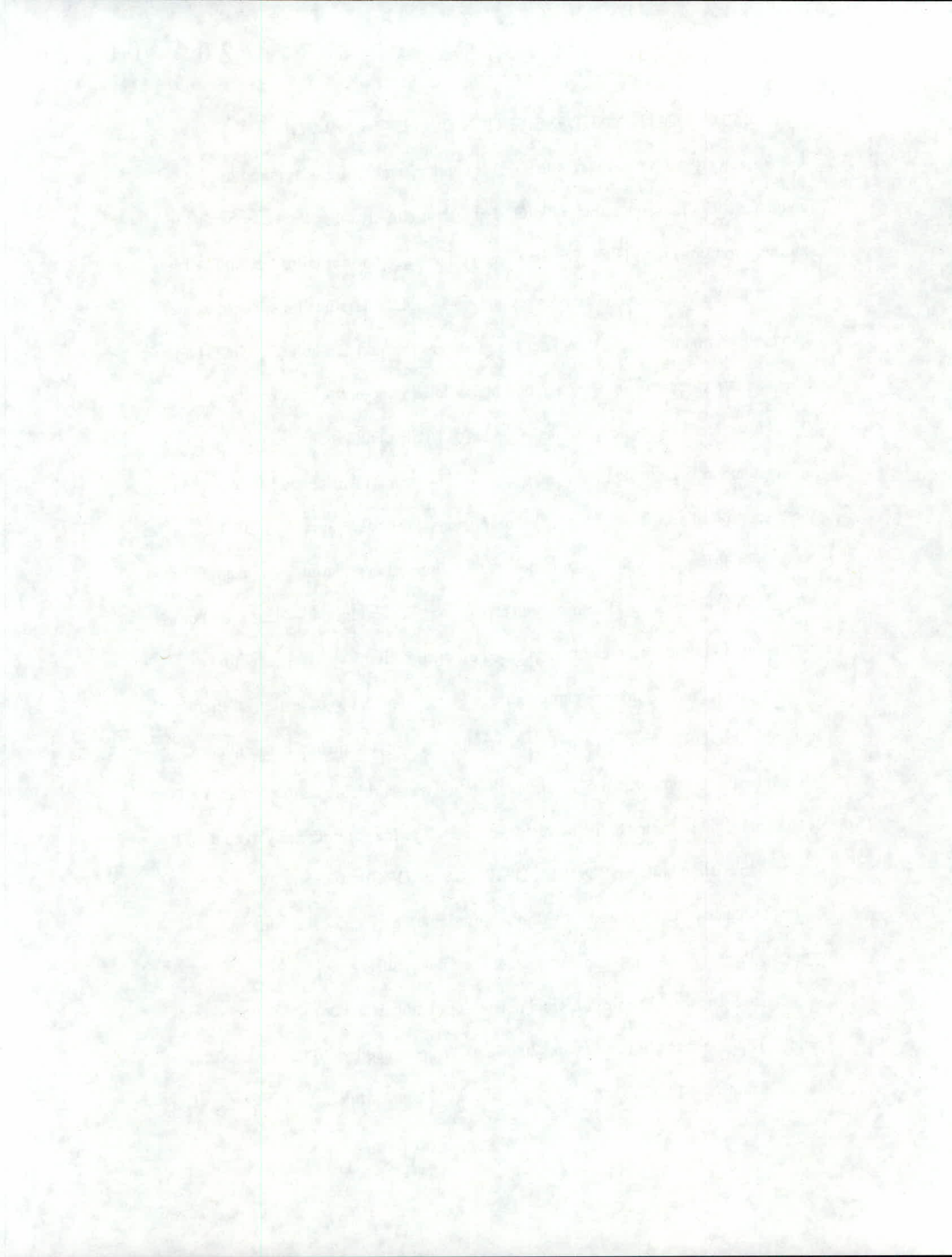


## EXHIBIT D. ADDITIONAL DESCRIPTION OF UICF-LAMBERT

UICF-Lambert is a semi-dwarf wheat that is similar Lambert in its agronomic characteristics. In terms of height UICF-Lambert is slightly taller than Lambert under rainfed conditions with UICF-Lambert being on average one cm taller (Exhibit D Table 1). UICF-Lambert has erect flag leaves and has a slightly later heading date than Lambert, averaging 1.5 to 2 days later than Lambert (Exhibit D Table 1). UICF-Lambert has good straw strength showing slightly higher lodging potential than Lambert, especially under irrigated conditions. Glumes of UICF-Lambert are awned and seed is intermediate to large in size, white and soft. UICF-Lambert was tested as ID99-435 in the Western Regional White Winter Wheat Nursery for three years (2005-2007)

UICF-Lambert shows a minimal level of injury to application of imazamox in the spring at either the 1X or 2X rate at both an early application time (3-4 leaf stage) or a late application time (prior to jointing) based on yield with the greatest reduction occurring with the 2X late application in three years (2004-2006) of testing (6 site/years). In some cases, UICF-Lambert was higher yielding with herbicide application than without based on comparison of performance to the non-herbicide control. It showed less or an equal level of injury to the herbicide in all trials as the commercially available imazamox resistant cultivars IDO 587, ORCF-101 and ORCF-102. BASF has reviewed the performance of UICF-Lambert with their imazamox herbicide 'Beyond' and approved its release as a imazamox resistant Clearfield cultivar.

UICF-Lambert has similar yield potential to Lambert under rainfed conditions. (Exhibit D Table 1,2). In three years (2005-2007) of advanced yield testing in Northern Idaho (18 site/years) UICF-Lambert averaged 6,831 kg ha<sup>-1</sup> while Lambert averaged





7,033 kg ha<sup>-1</sup>. In three years (2006-2008) of extension testing in Northern Idaho (15 site/years), UICF-Lambert averaged 5,151 kg ha<sup>-1</sup> compared to 5,017 kg ha<sup>-1</sup> for Lambert.

UICF-Lambert has similar test weight as Lambert under rainfed conditions. (Exhibit D Table 1,2). In 3 years of advanced testing (18 site/years), UICF-Lambert had an average test weight of 741 kg m<sup>-3</sup> compared to 750 kg m<sup>-3</sup> for Lambert. In the Northern Idaho extension trials UICF-Lambert' test weight was 741 kg m<sup>-3</sup> while Lambert averaged 743 kg m<sup>-3</sup>.

UICF-Lambert has similar end-use quality as Lambert. In three years (2005-2007) of evaluation in the Idaho advanced yield trials (14 site/years) UICF Lambert score for percent flour protein (8.4% to 8.3%), percent break flour (38.9% to 38.7%), percent flour yield (67.3% to 67.2%) and cookie diameter (8.4 cm to 8.3 cm) was nearly identical to that of Lambert (Exhibit D Table 3).

UICF-Lambert has similar high temperature adult plant (HTAP) resistance to stripe rust (caused by *Puccinia striiformis* Westend.) based on extension testing (Exhibit D Table 4). Early infection with new races of stripe rust (Race 127) in 2010 (Exhibit D Table 5) indicate that if environmental conditions such as a cool, wet spring occur, the stripe rust resistance in UICF-Lambert can be overcome and the cultivar would require fungicidal application to prevent yield loss. UICF-Lambert is susceptible to strawbreaker footrot (caused by *Pseudocercospora herpotrichoides* (Fron) Deighton) but appears to have an intermediate level of tolerance to Cephalosporium stripe (caused by *Hymenula cerealis* Ellis & Everh.). UICF-Lambert is moderately susceptible to dwarf bunt (caused by *Tilletia controversa* Kühn in Rabenh.).



## REFERENCES:

- Allan, R.E., C.J. Peterson, Jr., G.L. Rubenthaler, R.F. Line, and D.E. Roberts. 1989. Registration of 'Madsen' wheat. *Crop Sci.* 29: 1575.
- Carter, A.H., J. Hansen, T.Koehler, D.C. Thill, and R.S. Zemetra. 2007. The effect of imazamox application timing and rate on imazamox resistant wheat cultivars in the Pacific Northwest. *Weed Tech.* 21: 895-899.
- Tan, S., R.R. Evans, M.L. Dahmer, B.K. Singh, and D.L. Shaner. 2005. Imidazolinone-tolerant crops: history, current status and future. *Pest Manag. Sci.* 61: 246-257.
- Zemetra, R.S., C.T. Liu, W.E. Kronstad, M. Lauver, and N. Haugerud. 1995. Registration of 'Lambert' wheat. *Crop Sci.* 35: 1222.

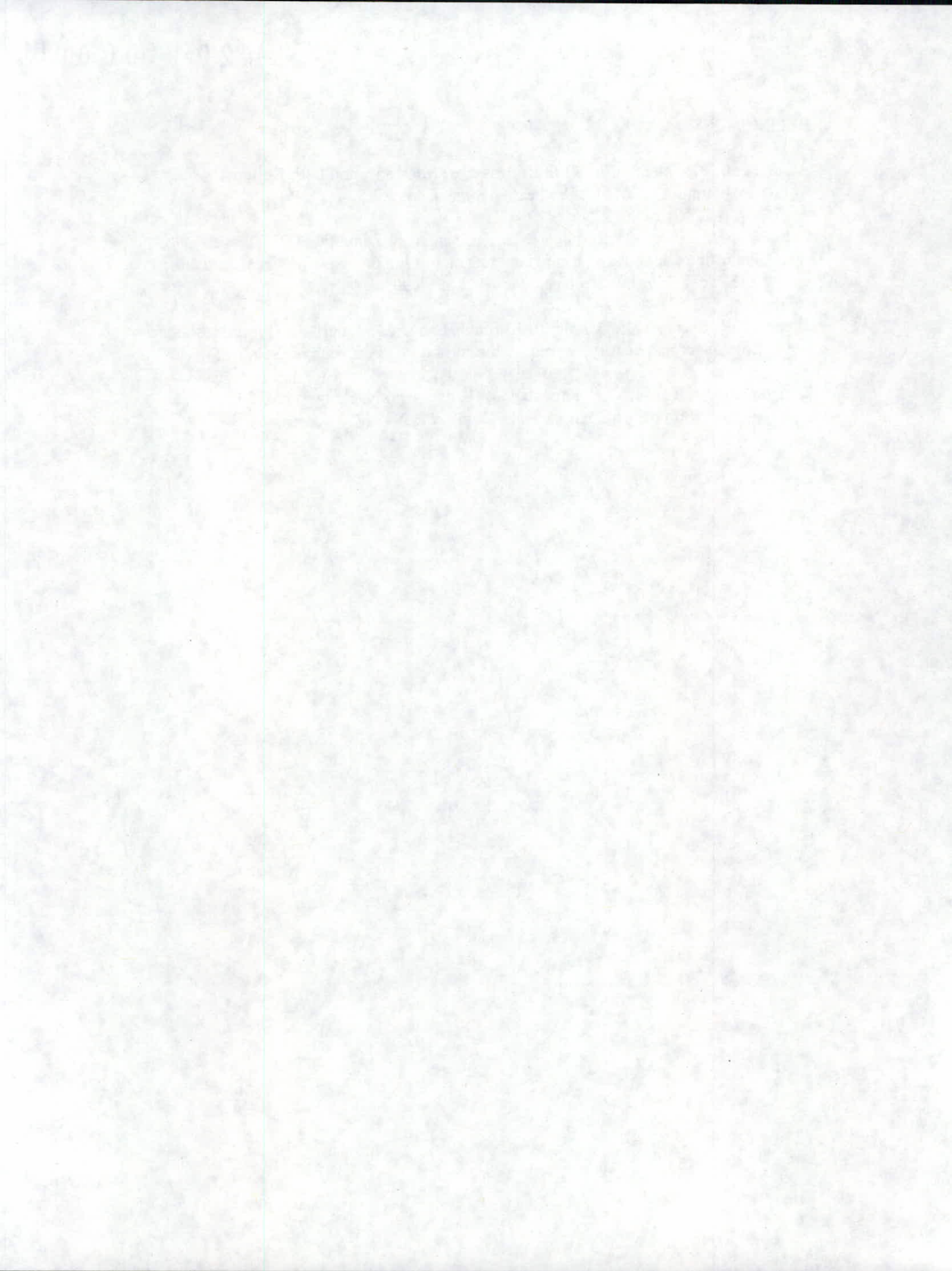


Exhibit D - Table 1. Mean agronomic performance of UICF-Lambert, Lambert and Stephens over three years (2005-2007) of testing in the Idaho Advanced Yield Trial

<b>heading date - Julian</b>				
<u>entry</u>	<u>Mosc-05</u>	<u>Mos-06</u>	<u>Mos-07</u>	<u>mean</u>
UICF-Lambert	162	159	159	160.0
Lambert	159	160	156	158.3
Stephens	157	159	158	158.0
<b>height - cm</b>				
<u>no. locations</u>	<u>3</u>	<u>7</u>	<u>6</u>	<u>16</u>
UICF-Lambert	103.4	87.6	89.2	93.4
Lambert	101.6	84.3	85.6	90.5
Stephens	96.5	81.0	79.2	85.6
<b>yield - kilograms/hectare</b>				
<u>no. locations</u>	<u>5</u>	<u>7</u>	<u>6</u>	<u>18</u>
UICF-Lambert	7189	7122	6181	6831
Lambert	7794	7055	6249	7033
Stephens	7794	6988	5577	6786
<b>test wt kg/m<sup>3</sup></b>				
<u>no. locations</u>	<u>5</u>	<u>7</u>	<u>6</u>	<u>18</u>
UICF-Lambert	741	744	737	741
Lambert	762	746	743	750
Stephens	761	746	723	743



Exhibit D - Table 2. Mean agronomic performance of UICF-Lambert, Lambert and Stephens over three years (2006-2008) of testing in the Northern Idaho Extension Trials.

<b>yield- kg/hectare</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>mean</b>
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>15</u>
UICF-Lambert	5644	4770	5039	5151
Lambert	5510	4569	4972	5017
Stephens	5510	4502	4838	4950
<b>test wt kg/m<sup>3</sup></b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>mean</b>
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>15</u>
UICF-Lambert	730	746	747	741
Lambert	731	750	747	743
Stephens	732	737	733	734





Exhibit D - Table 3. End-use quality performance over three years for UICF-Lambert, Lambert and Stephens. Data includes percent flour protein (% fl pro), percent break flour (% break flour), percent total flour yield (% fl. yld), and cookie diameter based off of the sugar snap cookie test.

<b>% fl pro</b>	rainfed-05	rainfed-06	rainfed-07	mean
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>14</u>
UICF-Lambert	8.2	8.9	8.2	8.4
Lambert	7.7	9.0	8.2	8.3
Stephens	8.5	8.9	9.2	8.9

<b>% break flour</b>	rainfed-05	rainfed-06	rainfed-07	mean
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>14</u>
UICF-Lambert	39.3	37.8	39.5	38.9
Lambert	39.3	36.3	40.4	38.7
Stephens	37.3	33.6	37.9	36.3

<b>% fl yld</b>	rainfed-05	rainfed-06	rainfed-07	mean
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>14</u>
UICF-Lambert	66.7	68.8	66.5	67.3
Lambert	66.9	67.9	66.8	67.2
Stephens	66.0	68.4	65.9	66.8

<b>cookie dia - cm</b>	rainfed-05	rainfed-06	rainfed-07	mean
<u>no. locations</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>14</u>
UICF-Lambert	8.4	8.3	8.4	8.4
Lambert	8.3	8.2	8.4	8.3
Stephens	8.4	8.4	8.5	8.4

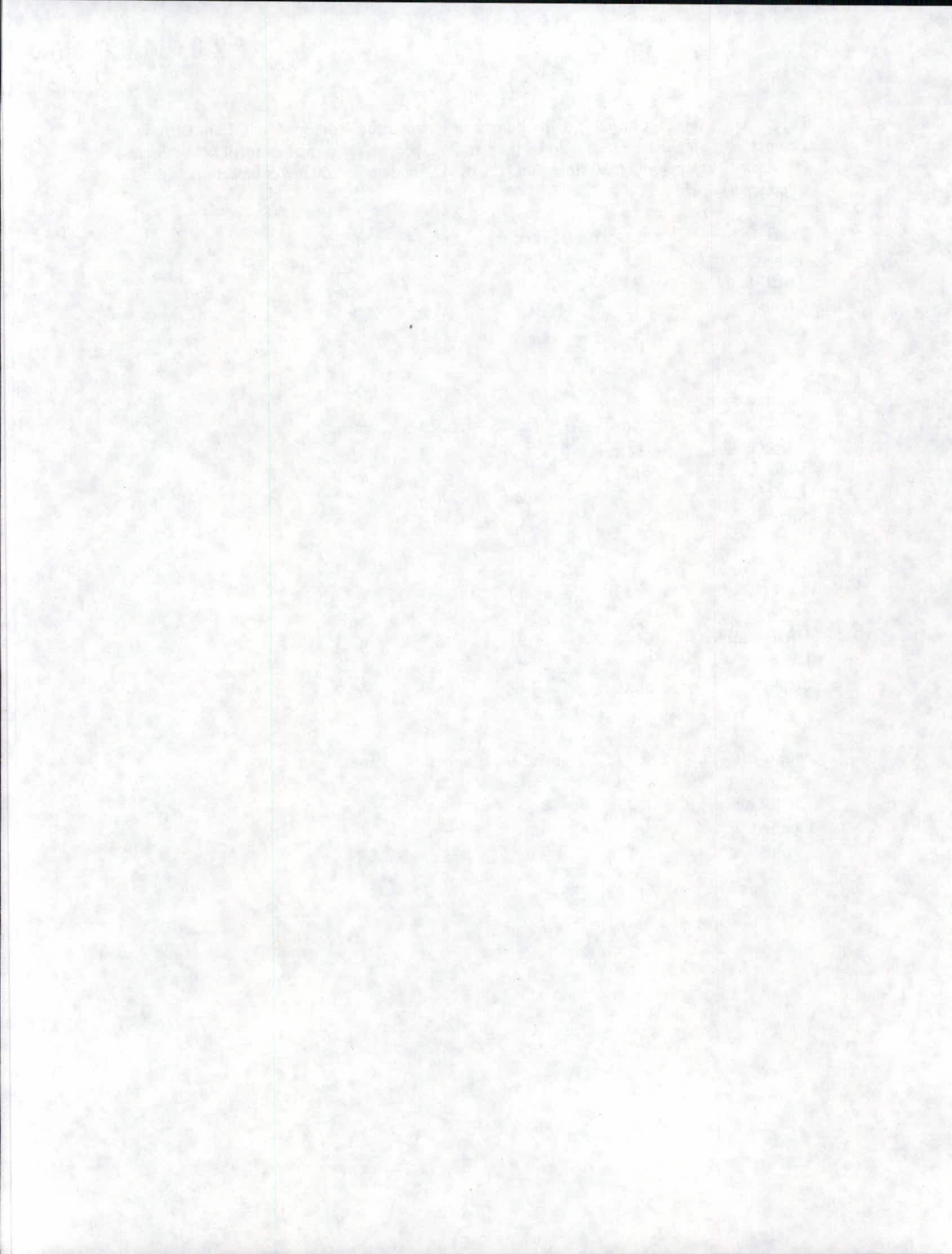


Exhibit D - Table 4. Stripe rust infection type (IT) and severity (%) on cultivars and lines in the 2006 Winter Extension Disease Nursery at Spillman Farm (LOC-1), Plant Path Farm (LOC-3), and Whitlow Farm (LOC-4) near Pullman, WA, Mt. Vernon, WA (LOC-5), Walla Walla, WA (LOC-6), and Lind, WA (LOC-7), when recorded at the indicated dates and stages of plant growth under natural infection.

Entry	VARIETY#	CLASS	VARIETY	2006 PLOT	Stripe rust																				
					LOC 1		LOC 3		LOC 4		LOC 5		LOC 6		LOC 7										
					IT	%	IT	%	IT	%	IT	%	IT	%	IT	%	IT	%							
26	PI583372	SW	LAMBERT	27	2	5	2-3	20	2	1	3	5	2	2	10	2	2	2	2	5	3	20	3	30	
31	ID990435	SW	ID990435	32	2	1	2-3	20	2	5	2	2	2	2	10	2	5	2	2	5	5	60	3	20	
34	CI017596	SW	STEPHENS	35	2	1	2	5	2	1	2	2	5	20	2	5	2	5	2	2	1	2	2	3	10

Exhibit D - Table 5. Stripe rust infection type (IT) and severity (%) on cultivars and lines in the 2010 Idaho Advanced Line Disease Nursery at Whitlow Farm (LOC-4) near Pullman, WA, and Mt. Vernon, WA (LOC-5), when recorded at the indicated dates and stages of plant growth under natural infection.

Nursery name	Entry #	Entry	2010 PLOT	LOC 04				LOC 05			
				6/24/10		4/14/10		5/24/10		5/24/10	
				IT	%	IT	%	IT	%	IT	%
0910 IYT	2	Lambert	2	8	50	3	20	2	10		
0910 IYT	11	UI-CF Lambert	11	8	60	3	20	2	30		
0910 IYT	1	Stephens	1	2	30	5	50	2	20		



U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E  
 STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S)  <b>University of Idaho</b>	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <b>ID99-435</b>	3. VARIETY NAME <b>UICF-Lambert</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) <b>Morrill Hall 414                  P.O. Box 443003                  Moscow, Idaho 83844-3003</b>	5. TELEPHONE (Include area code) <b>208-885-4550</b>	6. FAX (Include area code) <b>208-885-4551</b>
7. PVPO NUMBER  <div style="text-align: right; font-size: 1.5em; font-weight: bold;">#201100008</div>		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.  YES  NO

9. Is the applicant a U.S. national or a U.S. based entity? If no, give name of country.  YES  NO

10. Is the applicant the original owner?  YES  NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?  YES  NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?  YES  NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

UICF-Lambert (ID99-435) was developed by the University of Idaho's soft white winter wheat breeding program.

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

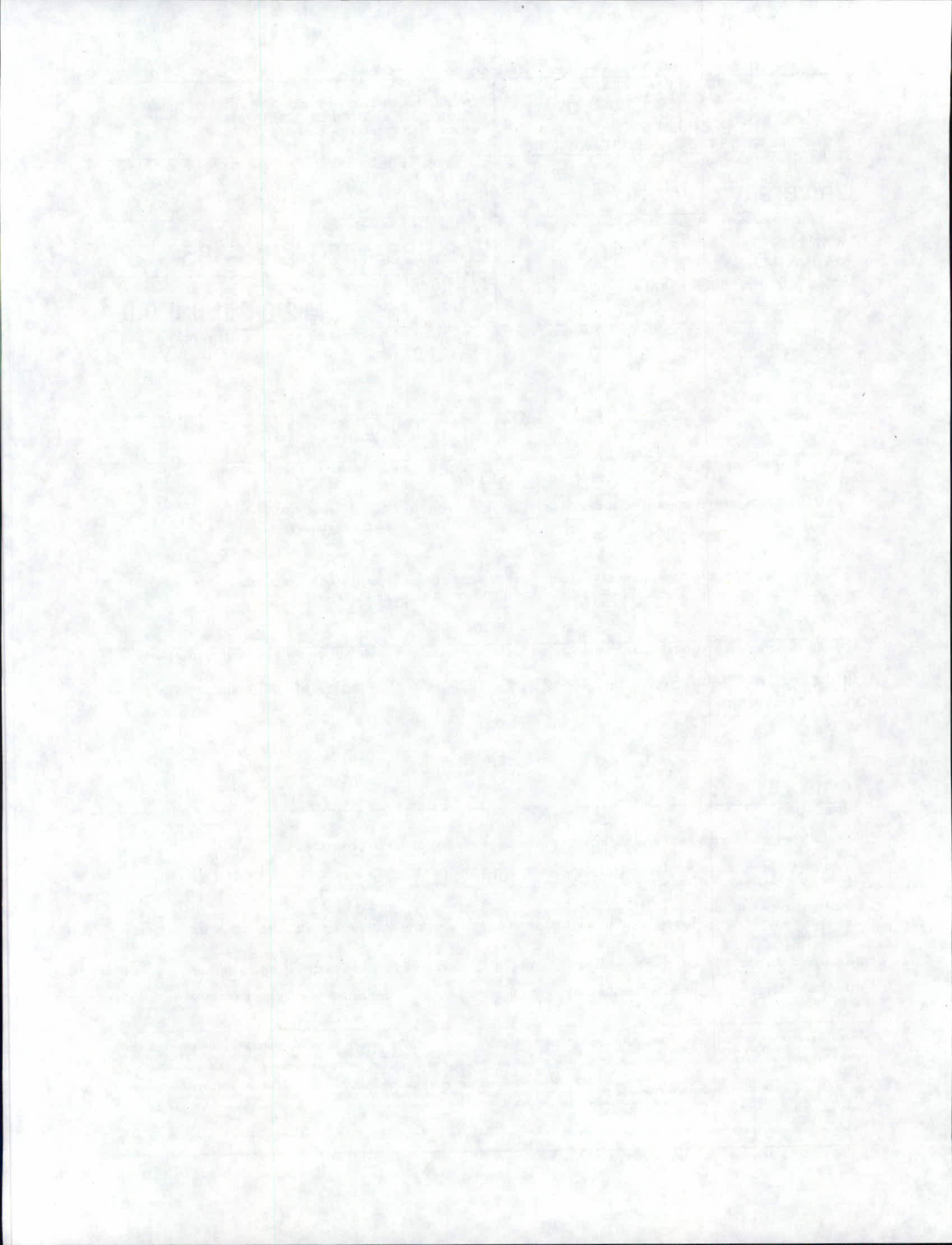
1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved OMB NO 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

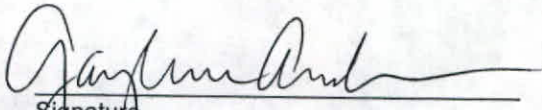
To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

EXHIBIT F  
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S) University of Idaho	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) Morrill Hall 414 P.O. Box 443003 Moscow, Idaho 83844-3003	TEMPORARY OR EXPERIMENTAL DESIGNATION ID99-435
		VARIETY NAME UICF-Lambert
NAME OF OWNER REPRESENTATIVE (S) Gaylene Anderson	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) Morrill Hall 414 P.O. Box 443003 Moscow, Idaho 83844-3003	FOR OFFICIAL USE ONLY
		PVPO NUMBER #201100008

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

  
Signature

10/5/10  
Date

