

2004/2005 Winter Grain Prospects in the Northern Hemisphere Outside of the United States

Prepared by the Joint Agricultural Weather Facility

This article summarizes early prospects for Northern Hemisphere winter grains outside the United States based on the assessment of weather conditions from the fall 2003 to the present planting season.

Winter Grains Summary: Prospects for 2004/05 winter grains (wheat, barley, and rye) in most Northern Hemisphere growing areas outside of the United States are better than last year. Improved weather conditions have boosted winter grain prospects well above last year in many countries from Europe eastward through Ukraine and Russia. Weather conditions have been overall favorable for winter grains in the Middle East and Northwestern Africa, where crop prospects are expected to be above average. In India, prospects for wheat are above last year, despite a heat wave in the early spring that stressed crops in the filling stage. In China, weather conditions have been less favorable than the previous year, although recent rains have been timely for winter wheat advancing through the reproductive phase of development. In eastern Canada, weather conditions have favored the winter wheat crop, while near- to above-normal winter and spring rainfall in northern and central Mexico favored winter grains and boosted irrigation supplies.

European Union: Prospects for winter grains are better than last year throughout most of the region (EU-25). During the autumn of 2003, low soil moisture resulting from a summer drought and below-normal September rainfall slowed winter grain planting in the United Kingdom, northern France, and northern Germany. However, in October and November, near- to above-normal rainfall provided favorable establishment

conditions for winter grains across the region. During the winter, seasonable temperatures and near-normal precipitation provided excellent overwintering conditions for winter grains. Soil moisture levels for winter crops recovered from last year's summer heat wave and drought. Overall, across the EU-25 (Figure 1), the threat from potential winterkill was much less in the winter of 2003-04 than the previous winter (2002-03). Only portions of the new EU member states (NMS-10) experienced minor potential winterkill, as the result of only 1 or 2 days with sparse snow cover and extremely cold weather (less than -15 degrees C). In March and April, active weather across the Mediterranean produced widespread rainfall in Spain, Italy, and the western Balkans, boosting soil moisture for vegetative winter grains. Spring rainfall was slightly below normal across portions of northeastern France and Germany, but soil moisture remained adequate for vegetative winter crops. In early May, wet weather alleviated short-term dryness in these areas.

Southeastern Europe: Across the Balkans, prospects for winter grains are much better than last year. Near- to above-normal autumn rainfall recharged moisture depleted by the previous summer's drought, boosting topsoil moisture for winter grain planting. However, much-above-normal rainfall slowed fieldwork in the Lower Danube River Valley (southern Romania and northern Bulgaria). Across the Balkans, seasonable

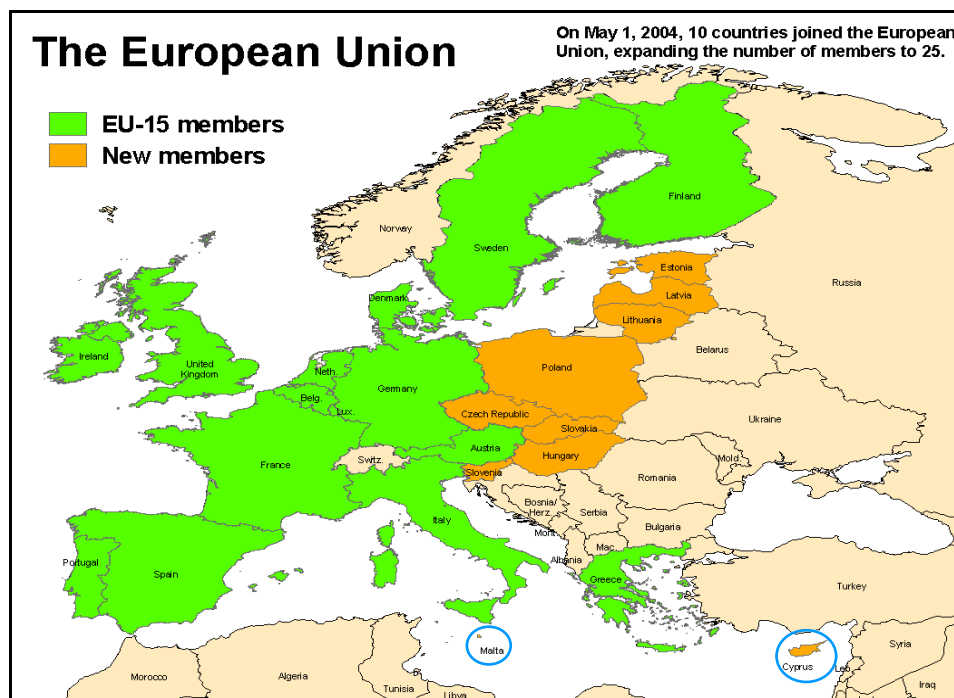


Figure 1.

temperatures and near-normal precipitation provided an adequate protective snow cover for most of the winter. In February, warmer weather melted the protective snow cover and was followed by a cold snap in late February, possibly causing some isolated crop damage. Overall, the threat from potential winterkill was less this winter (2003-04) than the previous winter (2002-03). Winter crops broke dormancy in mid-March, which was slightly earlier than normal. Below-normal rainfall in April and early May has lowered soil moisture in these areas, and rain is needed to maintain current favorable crop prospects.

Ukraine: Prospects for 2004/05 Ukraine winter grain crops are considerably better than last year at this time, despite fall dryness and an early spring freeze in southernmost growing areas. Last fall, below-normal precipitation was observed throughout most of the country in September, slowing winter wheat planting and crop emergence. Less than half the normal amount of moisture was observed in some southern and eastern areas, where about 30 percent of the winter wheat crop and 15 percent of the winter barley crop are historically grown. September's dryness was followed by adequate moisture in October and November, favoring winter grain establishment. Winter grains entered dormancy in much better condition than last year. Mild weather prevailed over winter wheat areas during most of the winter, providing favorable overwintering conditions for crops. Winterkill is believed to be no more than 5 percent, and far less than the widespread winterkill (more than 50 percent) of last year. Winter wheat broke dormancy in March, about 1 to 2 weeks earlier than usual. In early April, a hard freeze (minimum temperatures ranging from -9 to -5 degrees C) was observed as far south as southern Ukraine. Freeze damage to winter wheat and winter barley was likely confined to extreme southern Ukraine, where crops were in or nearing the jointing stage of development. In early May, timely rains reversed a drying trend that began in March, improving conditions for winter grains that were in the jointing stage throughout most of the country.

Russia: Prospects for the 2004/05 winter wheat crop are better than last year. Generally favorable weather for planting and fall establishment was followed by a favorably mild winter that resulted in below average winterkill. Last year, frequent showers fell in northern Russia (Northwest Region, Central Region, and Volga Region) in August and early September, delaying planting activities. However, drier weather during the second half of September improved conditions for fieldwork, and unseasonably mild weather in October allowed late-season establishment. Farther south, in major winter wheat producing areas of the Southern Region in Russia, locally heavy rain in early September boosted topsoil moisture to prepare for planting the 2004 winter wheat crop. Although a drying trend began about September 8 and persisted until month's end, mild weather and adequate moisture in October and November favored winter grain establishment; crops entered dormancy in much better condition than last year. Mild weather during most of the winter provided favorable overwintering conditions for winter grains. However, a few brief winter episodes of bitter cold overspread winter grain areas. In most cases, the extreme cold was of short duration and occurred in areas that were protected by an adequate snow cover, minimizing the threat for significant damage to winter grains. In

March, unusually mild weather caused winter wheat in major producing areas of Ukraine and the Southern Region in Russia to break dormancy about 1 to 2 weeks earlier than usual and raised soil temperatures to sufficient levels for early spring grain planting. In early April, unseasonably mild weather was replaced by a cold snap that spread southward across the region. The colder weather halted additional vegetative growth of winter wheat in southern Russia and kept winter grains dormant in northern Russia. Low temperatures ranged from -11 to -6 degrees C as far south as the Black Sea Coast. The cold snap created the potential for some damage to winter wheat that was in or nearing the jointing stage of development in extreme southern growing areas.

Northwestern Africa: In Morocco, Algeria, and Tunisia, crop prospects for winter grains are above average for the 2nd consecutive year. Winter grains are usually planted from mid-November to mid-December throughout the region. All three countries received widespread above-normal rainfall in November, boosting topsoil moisture reserves for winter grain planting. In Morocco, below-normal rainfall in December favored late planting, but the dryness continued into late January, reducing available soil moisture for vegetative winter grains. However, near- to above-normal rainfall from February through April benefited vegetative to reproductive winter grains, boosting yield prospects. In Algeria and Tunisia, there were no prolonged periods of dry weather. Cumulative rainfall for the growing season (November to April) was above normal but less than last year in Morocco, near normal in Algeria, and above normal (but slightly less than last year) in Tunisia. Above-normal April rainfall benefited crops across the region. Rain in early May slowed winter grain harvesting in Morocco, while drier weather favored crop maturation in Algeria and Tunisia.

Middle East: In Turkey, near- to above-normal precipitation during the autumn favored winter grain planting and establishment. Near- to above-normal winter precipitation boosted irrigation supplies and maintained favorable moisture conditions for overwintering crops. Across the central Plateau, although there were several episodes of bitterly cold weather, an adequate snow cover protected dormant winter grains. Winter temperatures averaged near normal, unlike last year's unseasonably warm winter weather and widely fluctuating temperatures. Winter grains broke dormancy around the usual dates of middle to late March. Rainfall was slightly below normal during March, but near- to above-normal April rain benefited vegetative winter grains. In western Iran, near-normal precipitation during the autumn favored winter wheat planting and establishment. During the winter, precipitation was slightly below normal and temperatures averaged above normal. The unseasonable warmth continued into early spring, causing winter grains to break dormancy much earlier than usual. The early arrival of spring warmth increased crop water use. Crop prospects remain favorable, and similar to last year. Across the eastern Mediterranean countries of Syria, Lebanon, Israel, and Jordan, cumulative precipitation from September 2003 to April 2004 was near to above normal, boosting irrigation supplies for winter grains. Prospects for winter grains are similar to last year in these areas.

India: Prospects for the wheat crop are better than last year, due to a favorable summer monsoon season that provided soil moisture for fall planting and crop establishment, and boosted irrigation supplies for the growing season. Moisture conditions favored fall planting and germination. During the winter months, rainfall was seasonably light but provided adequate moisture for maintaining normal crop development. In the second half of March, unseasonably hot weather dominated most of the northern and western crop areas. Maximum temperatures topped 40 degrees C, stressing winter wheat in the filling stage of development and hastening crop maturity. In late April, locally heavy rain fell from Punjab and Haryana into western Uttar Pradesh, slowing harvest activities. Harvest typically occurs from April to June.

China: Yield prospects for winter wheat are similar to last year. Planting and establishment of the 2003-04 winter wheat crop was hampered by unusually wet weather that began over central China during the 2003 summer growing season and persisted into the fall. On the North China Plain, locally heavy rain and flooding continued until the middle of October, delaying summer crop harvesting, especially cotton. Once farmers could plant winter crops, excessive topsoil moisture limited winter wheat establishment prior to the crop entering dormancy. From December through February, unseasonably mild weather minimized the potential for winterkill of overwintering crops. However, the warmth continued through March and early April, spurring crops to break dormancy on or slightly ahead of schedule. The combination of early warmth and drying topsoils may have caused some stress on poorly established crops prior to reproduction. However, timely, albeit light, showers brought some relief to heading crops in the driest locations on the North China Plain, where long-term moisture reserves favor crop development once crops become better established. Winter wheat harvesting begins at the end of May in the south and continues through mid-June.

Canada: In Ontario, generally seasonable winter precipitation and temperature maintained favorable overwintering conditions

for the 2003/04 winter wheat crop. In January, a cold weather outbreak (lows of -20 degrees C or lower) was preceded by a layer of protective snow cover, reducing the threat of winterkill to dormant crops. Winter wheat in eastern Canada is currently tillering to jointing, and typically heads in June. On the Prairies, parts of Alberta and Saskatchewan are still suffering the effects of long-term drought and need timely showers through the end of May to ensure even germination and establishment. Moisture reserves are favorable in Manitoba and Saskatchewan's northeastern growing areas. Spring wheat planting, including durum wheat, has just begun in western Canada.

Mexico: During the autumn planting season, above-normal rainfall boosted moisture supplies for winter grains across northern Mexico and the lower Rio Grande Valley. In the western Sierra Madre watershed and northwestern Mexico, much-needed, above-normal winter rainfall increased irrigation supplies that had been extremely low. A majority of this rain fell in January, which interrupted winter fieldwork along the western coast (Sinaloa). Temperatures during the autumn and winter averaged near normal across most of the country. During March and April, near- to above-normal precipitation fell across northern and central Mexico, favoring winter grains and increasing irrigation supplies. The spring rainfall was especially beneficial for winter sorghum in the northeast. Based on reservoir data from the National Water Commission of Mexico and the Mexican Center of Agricultural Statistics, irrigation supplies remained low in northwestern Mexico, but were favorable elsewhere. At the end of March, reservoirs in northwestern Mexico were at their second-lowest levels in a decade, at 19 percent of capacity, but nearly 10 percentage points higher than last year at this time. Typically, reservoirs in this region average 25 to 30 percent of capacity. Reservoirs in northwestern Mexico comprise nearly half of the total reservoir capacity in the country.